Commonwealth of Pennsylvania

BULLETIN No. 270

FARMERS' INSTITUTES

IN PENNSYLVANIA

TO BE HELD UNDER THE
AUSPICES OF

The Pennsylvania Department of Agriculture

COMPILED BY

A. L. MARTIN, Director of Institutes

SEASON 1915-1916.

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Commonwealth of Pennsylvania

BULLETIN No. 270

FARMERS' INSTITUTES IN PENNSYLVANIA

To be held under the auspices of the Department of Agriculture of the State of Pennsylvania during Season of 1915-16.

ACT OF THE LEGISLATURE OF MARCH 13, 1895.

"Section 5. That it shall be the duty of the Superintendent of Institutes to arrange them in such manner as to time and places of holding the same as to secure the greatest economy and efficiency of service, and to this end he shall, in each county where such institutes are to be held, confer and advise with the local member of the State Board of Agriculture, together with representatives duly ap pointed by each county agricultural, horticultural and other like organizations with reference to the appointment of speakers and other local arrangements."

TABLE OF CONTENTS

	Page
Letter of Transmittal,	5
Suggestions to Institute Managers,	8
Directions for Constituting Local Committees on Institute Work in the Several Counties of Pennsylvania,	12
Apportionment for 1915-1916,	14
Alphabetical List of Farmers' Institutes by Counties,	15
Schedule of Places, Dates of Lecturers,	23
First Section,	23
Second Section,	24
Third Section,	25
Fourth Section,	27
Fifth Section,	28
Movable Institute Schools,	30
Outline of Topics,	30
Schedule of Places and Dates of Movable Institute Schools,	37
List of Speakers and Their Assignments,	38
List of Speakers and Their Subjects,	49
List of Special Institute Instructors,	64
Department Lecturers,	64
Biographical Sketches of Institute Lecturers,	65
Sample Program,	71

LETTER OF TRANSMITTAL

DEPARTMENT OF AGRICULTURE

Harrisburg. Pa., *Aug. 23, 1915.*

Hon. N. B. Critchfield, *Secretary of Agriculture:*

Dear Sir: In accordance with the provisions of the Act creating the Department of Agriculture, I have the honor to present herewith the schedule of Farmers' Institutes of Pennsylvania for the season of 1915-1916; also a complete list of lecturers, with their subjects and their assignments.

Very respectfully,

A. L. MARTIN,
Director of Institutes.

COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF AGRICULTURE

DIVISION OF INSTITUTES

Harrisburg, Pa., *Aug. 23, 1915.*

To the County Chairmen and Boards of Institute Managers in the Several Counties of Pennsylvania:

Gentlemen: In presenting this annual Bulletin, we desire to express approval of the work accomplished by most of our County Institute Managers and the committees organized by them, to whom much credit is due for the high degree of success attending the last season's Institutes. We respectfully invite your careful attention to "Directions" on the following pages, which are prepared with reference to the requirements and demands of persons filling the position of County Chairman of Institutes.

IMPORTANT

INSTITUTE MANAGERS AND PROGRAM COMMITTEES WILL PLEASE READ THE FOLLOWING DIRECTIONS BEFORE ARRANGING PROGRAMS AND CAREFULLY COMPLY WITH SAME IN CONDUCTING INSTITUTES

1. We recommend that programs for all the Institutes held within a county be printed on connected leaves or sheets. This practice is recommended because of economy in cost of printing, also the wider advertising of the different institutes held within the county.

2. Prepare program at least thirty days before the date of Institute.

3. Arrangements should be made with persons in your locality who are to take part on the program either by essay, address or reading, at least eight weeks previous to the meeting.

4. Have a Question Box, and place it in charge of some competent person who will carefully conduct the same.

5. Exclude from Institutes all sectarian and partisan topics.

6. Print on program the name and postoffice address of Chairman and members of Committees.

7. Thoroughly advertise the Institute by distributing programs, invitation postal cards, posters, and make use of your local newspapers.

8. Select a competent secretary to take notes and report proceedings of meeting to local papers.

9. Invite representatives of newspapers to a place at Recording Secretary's table, and solicit their aid and assistance in reporting proceedings of meeting.

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10. For a two-day Institute, provide for five sessions, taking up not more than two topics at any one session, and where local speakers have places on program, the committee should be careful and see to it that their subjects shall conform to the topics under consideration at that particular session.

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11. Locate Institutes where a suitable hall or church can be procured and the greatest number accommodated, as these meetings are for the benefit of farmers and their families and all others who may be interested.

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12. Extend a personal invitation to your County Superintendent of Public Schools to be present and take part, especially at the educational session, without which no Institute is complete. Invite all farm organizations, school teachers and children. See to it that young men and boys have a special invitation to the Institute.

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13. At least three State speakers will be in attendance, and a list of topics which they are prepared to discuss can be found in another part of this Bulletin. From this list the Committee on Program should select such topics as would most interest the farmers in their section, and place same opposite the lecturer's name on program.

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14. The County Chairman should, as soon as arrangements are completed for holding Institute, enclose to all lecturers expected to be present, a copy of program, with letter designating what railroad station to stop at, and the name of the hotel secured for their accommodation. In case Institute is held at a distance from railroad. speakers must be met by conveyances and taken to Institute. The expense of getting from and to such stations is paid from funds placed in hands of County Chairman.

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15. Remember, the Institute is for the whole county and not merely for the town or locality where held. Begin advertising and do not fail to let the public know of your meeting.

16. The State is divided into five sections. Beginning November 15, five Institutes will be in session at the same time. Three State speakers will be present at all Institutes, one of whom will be a special representative of the Department and have charge of the section, to whom shall be referred all questions relating to local management of Institutes. His decision in such matters shall be final.

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17. It is important that the Chairman of County Board of Institute Managers make a complete report and mail same to the Director as soon as possible after the close of the Institutes. Blanks for this purpose will be forwarded him.

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18. Attention of Institute Managers and Program Committees is especially called to the plan of assigning speakers in the various sections. The leader of the section will be found at head of tabulated list of Places, and Additional Lecturers will be found at right of places where Institutes will he held. Do not make the mistake, as some Committees have done, and overlook the leader of the section, but place his name on the program in like manner as other speakers are assigned.

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19. The County Chairman should take personal charge of the meeting or select a person who is well qualified to fill the position.

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20. The opening exercises should be brief, not consuming more than thirty minutes, and may consist of an address of welcome and response, or a brief address by the Chairman introducing the speakers who come from a distance.

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21. Two topics thoroughly discussed at one session affords the opportunity for more effective instruction than three or four only partially presented.

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22. At Educational Session, confine all discussions to that important subject, whether the speakers be State or local.

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23. Where two evening sessions are held, have one devoted to Educational subjects and the other to the interests of the Country Home, its Comforts, Sanitary Conditions and Adornments.

24. Music, properly conducted, is in place at the Institute, but should be introduced as a recreation and be voluntary as no fund is set apart for this purpose.

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25. The amount of money to be distributed to the various managers for local expenses, will be according to the number of days of Institutes held. In order to make the amount ample for the coming season, the sum has been fixed at $12.50 per day of Institute. This provides $25.00 for each two days of Institute, to be used for local expenses, such as printing programs, rent of halls, and hotel and traveling expenses of local managers. County Chairmen are reimbursed for all reasonable expenses up to $12.50 per day, but no per diem pay is recognized.

DIRECTIONS FOR CONSTITUTING LOCAL COMMITTEES ON INSTITUTE WORK IN THE SEVERAL COUNTIES OF PENNSLVANIA

The act of March 13, 1895 (Section 5), makes the following provisions: "That it shall be the duty of the Superintendent of Institutes to arrange them in such manner as to time and places of holding the same, as to secure the greatest economy and efficiency of service, and to this end he shall, in each county where such institutes are to be held, confer and advise with the local member of the State Board of Agriculture, together with the representatives duly appointed by each county agricultural, horticultural or other like organizations, with reference to the appointment of speakers and other local arrangements."

In order to carry this provision of the law into effect, the Director of Institutes directs that these representatives, one from each county organization as stated, duly chosen and properly accredited, together with the County Chairman of Institutes, shall constitute a Board of County Institute Managers, of which the County Chairman of Institutes shall be the Chairman of the said Board. The organizations entitled to representation, are members of the State Board of Agriculture, County Agricultural and Horticultural Societies, Pomona Granges and County Alliances.

The duty of this Board shall be to confer and advise with each other and the Director of Institutes, with reference to the appointment of speakers and other local arrangements for holding institutes.

It shall be the duty of each county organization named to notify the Director of Institutes of the appointment of its representatives, and at the same time give a similar notice to the County Chairman of Institutes.

The County Chairman of Institutes, together with these representatives of the county organizations, shall meet for organization on the second Tuesday in June in each year, at one o'clock P. M., in the county town, at the office of the county commissioners. At this meeting the place for holding institutes for the ensuing season shall be selected, the same to be subject to the approval of the Director of Institutes. An institute committee will also be appointed at this time, for each locality in which institutes are to be held.

The County Chairman of Institutes, and each duly accredited representative of the county organizations in attendance upon this meeting shall, upon the certificate of the Chairman of the Board of Managers, be paid his expenses, not to exceed two dollars.

In these meetings every member shall have equal voice, and the action of the majority shall decide. Notice of the action of the Board shall be sent by the Chairman to the Director of Institutes, within ten days after the meeting.

In case no representative from any county organization of that county shall appear at the meeting on the second Tuesday of June, as stated, then the County Chairman of Institutes shall immediately report the fact to the Director of Institutes and proceed to arrange for the holding of institutes that year, without further consultation with the local organizations.

All moneys allotted to any county, for use in institute work, will be paid to the chairman of the local committee, to be accounted for by him in an itemized statement, audited and signed by auditors appointed by the committee, and then forwarded to this Department, not later than the first day of May in each year.

APPORTIONMENT FOR 1915-1916.

Section 1		Section 2		Section 3		Section 4		Section 5		Schools	
County	Days	County	Days	County	Days	County	Days	County	Days	County	Days
Adams,	6	Bedford.	5	Allegheny,	6	Bradford,	8	Bucks,	6	Cambria,	4
Chester,	8	Blair,	5	Armstroug,	6	Cameron,	2	Carbon,	6	Columbia,	6
Cumberland,	6	Cambria,	2	Clarion,	6	Clinton.	5	Delaware,	4	Montour,	4
Dauphin,	6	Center,	6	Butler,	6	Elk,	4	Lehigh,	6	.....	.....
Berks,	8	Clearfield,	5	Beaver,	6	Forest,	4	Luzerne,	6	.....	.....
Franklin,	6	Fulton,	4	Crawford,	8	Jefferson,	4	Lackawanna,	6	.....	.....
Lancaster,	12	Fayette.	5	Erie,	6	Lycoming,	6	Monroe,	5	.....	.....
Lebanon,	6	Huntingdon,	5	Greene,	4	McKean,	4	Montgomery,	8	.....	.....
Perry,	4	Indiana,	8	Lawrence,	6	Pike,	6	Northampton,	6	.....	.....
York,	12	Juniata,	4	Mercer,	6	Potter,	5	Philadelphia,	2	.....	.....
.....	.....	Mifflin,	4	Washington,	6	Sullivan,	4	Schuylkill,	6	.....	.....
.....	.....	Northumberland,	5	Westmoreland,	6	Susquehanna,	6	Wyoming,	4	.....	.....
.....	.....	Snyder,	4	Venango,	4	Wayne,	6	.....	.....	.....	.....
.....	.....	Somerset,	6	.....	.....	Warren,	5	.....	.....	.....	.....
.....	.....	Union,	4	.....	.....	Tioga,	8	.....	.....	.....	.....
	74		72		76		77		65		14

COMPLETE LIST OF

PENNSYLVANIA FARMERS' INSTITUTES,

SEASON OF 1915-16.

GIVING THE COUNTIES IN ALPHABETICAL ORDER AND THE NAME AND ADDRESS OF THE CHAIRMAN OF EACH COUNTY; ALSO POST-OFFICE AND RAILROAD STATION OF PLACE WHERE INSTITUTES ARE HELD

DIVISION OF INSTITUTES.

County.	Place.	Post Office.	Railroad Station.	Date.	Chairman of Institutes.
Adams,	Arendtsville,	Arendtsville,	Biglerville,	Dec. 13-14,	A. I. Weidner, Arendtsville.
	Fairfield,	Fairfield,	Fairfield,	Dec. 15-16,	
	New Oxford,	New Oxford,	New Oxford,	Dec. 17-18,	
Allegheny,	Millerstown,	Tarentum R. D.,	Tarentum,	Nov. 29-30,	C. L. Hood, Coraopolis, R. D. No. 3.
	Perrysville,	Allison Park R. D.,	Keown,	Dec. 1-2,	
	Mt. Union,	Carnegie R. D. No. 2,	Thornburg,	Dec. 3-4,	
Armstrong,	Spring Church,	Apollo,	Apollo,	Jan. 31-Feb. 1,	S. S. Blybolder, Kelly Station.
	Brick Church,	Brick Church,	Kelly Station,	Feb. 2-3,	
	Cowansville,	Cowansville,	Cowansville,	Feb. 4-5,	
Beaver,	Hanover U. P. Church.	Murdockville R. D.,	Cooks Ferry,	Nov. 22-23,	Walter C. Dunlap, West Bridgewater.
	Ohio Grange Hall,	Beaver R. D.,	Beaver,	Nov. 24-25,	
	Chippewa Grange Hall.	Beaver Falls R. D.,	Beaver Falls,	Nov. 26-27,	
Bedford,	Cessna,	Cessna,	Cessna,	Jan. 12-13,	W. F. Biddle, Everett, R. D. No. 2.
	Loysburg,	Loysburg,	Hopewell,	Jan. 14-15,	
	Mench,	Everett R. D. No. 3,	Everett,	Jan. 17,	
Berks,	Bally,	Bally,	Boyertown,	Feb. 21-22,	H. G. McGowan, Geigers Mills.
	Mt. Aetna,	Mt. Aetna,	Womelsdorf,	Feb. 23-24,	
	Temple,	Temple,	Temple,	Feb. 25-26,	
	Jacksonwald,	Jacksonwald,	Jacksonwald,	Feb. 28,	
	Geigertown,	Geigers Mills,	Geigertown,	Feb. 29,	
Blair,	Geeseytown,	Geeseytown,	Geeseytown,	Feb. 1-2,	W. Frank Beck, 1927 W. Chestnut Ave., Altoona, Pa.
	Newry,	Newry,	Newry,	Feb. 3-4,	
	Bellwood,	Bellwood,	Bellwood,	Feb. 5,	
Bradford,	Wilmont,	Wyalusing R. D.,	Wyalusing,	Dec. 15-16,	F. D. Kerrick, Towanda, R. D.
	Stevensville,	Stevensville,	Wyalusing,	Dec. 17-18,	
	Lime Hill,	Wyalusing,	Wyalusing,	Dec. 20-21,	
	Rome,	Wysox,	Rome,	Dec. 22-23,	
Bucks,	Springtown,	Springtown,	Springtown,	Jan. 31-Feb. 1,	B. F. Wambold, Sellersville.
	Sellersville,	Sellersville,	Sellersville,	Feb. 2-3,	
	Bristol,	Bristol,	Bristol,	Feb. 4,	
	New Hope,	New Hope,	New Hope,	Feb. 5,	
	Newtown,	Newtown,	Newtown,	Feb. 7-8,	

DIVISION OF INSTITUTES—Continued.

County.	Place.	Post Office.	Railroad Station.	Date.	Chairman of Institutes.
Butler,	Prospect,	Prospect,	Isle,	Jan. 17-18,	W. H. Milliron, Euclid.
	Bruin,	Bruin,	Bruin,	Jan. 19-20,	
	Evans City,	Evans City,	Evans City,	Jan. 21-22,	
Cambria,	Benshoff Church, (Movable Institute School), Salix.	Johnstown R. D.,	Johnstown,	Jan. 3-4,	L. J. Bearer, Hastings.
		Salix,	Salix,	Jan. 10-13,	
Cameron,	Emporium,	Emporium,	Emporium,	Feb. 21-22,	R. P. Heilman, Emporium.
Carbon,	Big Creek,	Lehighton,	Lehighton,	Nov. 24-25,	Edw. Leinhard, Lehighton, R. D. No. 2.
	Mahoning,	Lehighton,	Lehighton,	Nov. 26-27,	
	Weatherly,	Weatherly,	Weatherly,	Nov. 29-30,	
Center,	Millheim,	Millheim,	Coburn,	Dec. 13-14,	John A. Woodward, Howard.
	Pine Grove Mills,	Pine Grove Mills,	Pine Grove Mills,	Dec. 15-16,	
	Pleasant Gap,	Bellefonte R. D.,	Pleasant Gap,	Dec. 17-18,	
Chester,	Cedarville,	Pottstown,	Pottstown,	March 1-2,	M. E. Conard, Westgrove.
	Beyers,	Uwchland,	Beyers,	March 3-4,	
	Parkersburg,	Parkersburg,	Parkersburg,	March 6-7,	
	Doe Run,	Doe Run,	Doe Run,	March 8-9,	
Clarion,	Clarion,	Clarion,	Clarion,	Feb. 7-8,	J. H. Wilson, Clarion.
	Miola,	Clarion,	Clarion,	Feb. 9,	
	Frogtown,	Frogtown,	Limestone,	Feb. 10,	
	Sligo,	Sligo,	Sligo,	Feb. 11-12,	
Clearfield,	Kylertown,	Kylertown,	Winburn,	Dec. 20-21,	Harrison Straw, Clearfield.
	Troutville,	Troutville,	Sykesville,	Dec. 22-23,	
	Hickory,	Penfield,	Sabula,	Dec. 24,	
Clinton,	Woolrich,	Woolrich,	Lock Haven,	Feb. 23-24,	Joel A. Kerr, Millhall.
	Mackeyville,	Mackeyville,	Mackeyville,	Feb. 25-26,	
	Logauton,	Loganton,	Loganton,	Feb. 28,	
Columbia,	Jerseytown (Movable Institute School).	Jerseytown,	Jerseytown,	Jan. 4-6,	A. P. Young, Millville, R. D. No. 1.
	Numidia (Movable Institute School).	Numidia,	Catawissa,	Jan. 6-8,	

Crawford,	Cochranton,	Cochranton,	Cochranton,	Feb. 18-19,	W. F. Throop, Espyville.
	Conneaut Lake,	Conneaut Lake,	Conneaut Lake,	Feb. 21-22,	
	Dieksouburg,	Dieksonburg,	Dicksouburg,	Feb. 23-24,	
	Townville,	Townville,	Centerville,	Feb. 25-26,	
Cumberland,	Newburg,	Newburg,	Shippeusburg,	Jan. 17-18,	T. J. Ferguson, Mechaniesburg.
	Centerville,	Walnut Bottom,	Longsdorf,	Jan. 19-20,	
	Hogestown,	Mechanicsburg R. D.,	Mechaniesburg,	Jan. 21-22,	
Dauphin,	Gratz,	Gratz,	Elizabethville,	Jan. 31-Feb. 1,	E. S. Keiper, Middletown.
	Halifax,	Halifax,	Halifax,	Feb. 2-3,	
	Linglestown,	Linglestown,	Harrisburg,	Feb. 4-5,	
Delaware,	Village Green,	Chester R. D. No. 1,	Chester,	Feb. 18-19,	Thos. H. Wittkorn, Media.
	Williamson School,	Williams School,	Williams School,	Feb. 21-22,	
Elk,	St. Marys,	St. Marys,	St. Marys,	Feb. 11-12,	John G. Schmidt, St. Marys.
	Weedville,	Weedville,	Weedville,	Feb. 14-15,	
Erie,	West Green Grange Hall.	Waterford,	Waterford,	Feb. 28-29,	Archie Billings, Edinboro.
	North East,	North East,	North East,	March 1-2,	
	Girard,	Girard,	Girard,	March 3-4,	
Fayette,	Ohiopyle,	Ohiopyle,	Ohiopyle,	Nov. 19-20,	John T. Smith, Dunbar.
	Old Frame,	Smithfield,	Smithfield,	Nov. 22-23,	
	Tippecanoe,	Tippecanoe,	Tippecanoe,	Nov. 24,	
Forest,	Tionesta,	Tionesta,	Tionesta,	Feb. 7-8,	C. A. Randall, Tionesta.
	Clariugton,	Clarington,	Clarington,	Feb. 9-10,	
Franklin,	Dry Run,	Dry Run,	Richmoud,	Jan. 10-11,	J. P. Young, Marion.
	Fannettsburg,	Fannettsburg,	Richmond,	Jan. 12-13,	
	Marion,	Marion,	Marion,	Jan. 14,	
	Scotland,	Scotland,	Scotland,	Jan. 15,	
Fulton,	Rehoheth,	Hancock, Md.,	Hancock, Md.,	Jan. 18-19,	Frank Ranck, Haucock, Md., R. D.
	Clear Ridge,	Clear Ridge,	Haucock, Md.,	Jan. 20,	
	Enid,	Euid,	Haucock, Md.,	Jan. 21,	
Greene,	Jefferson,	Jefferson,	Rices Landing,	Dec. 13-14,	J. W. Stewart, Jefferson.
	Mt. Pleasant Church,	Wayneshurg,	Wayneshurg,	Dec. 15-16,	
Huntingdon,	Saltillo,	Saltillo,	Saltillo,	Jan. 22,	G. G. Hutchison, Warriors Mark.
	Warriors Mark,	Warriors Mark,	Warriors Mark,	Feb. 7-8,	
	Markelsburg,	James Creek,	Markelsburg,	Feb. 9-10,	
Indiana,	Elders Ridge,	Elders Ridge,	Iselen,	Nov. 26,	S. C. George, West Lebanon.
	Shelocta,	Shelocta,	Shelocta,	Nov. 27,	
	Flora,	Flora,	Flora,	Nov. 29-30,	
	Pine Flats,	Pine Flats,	Pine Flats,	Dec. 1-2,	
	Wilgus,	Wilgus,	Wilgus,	Dec. 3-4,	
Jefferson,	Zion Church,	Porter,	North Point,	Feb. 16-17,	Peter B. Cowan, Brookville.
	Beachwoods P. Church	Falls Creek,	Falls Creek,	Feb. 18-19,	

DIVISION OF INSTITUTES—Continued.

County.	Place.	Post Office.	Railroad Station.	Date.	Chairman of Institutes.
Juniata,	Richfield,	Richfield,	Mifflin,	Feb. 16-17,	Matthew Rodgers, Mexico.
	Port Royal,	Port Royal,	Port Royal,	Feb. 18-19,	
Lackawanna,	Daleville,	Daleville,	Moscow,	Dec. 1-2,	Horace Seamans, Factoryville.
	Tompkinsville,	Jermyn,	Jermyn,	Dec. 3-4,	
	Bald Mount,	Clarks Summit,	Clarks Summit,	Dec. 6-7,	
Lancaster,	Blue Ball,	Blue Ball,	Blue Ball,	Nov. 19-20,	J. W. Bruckart, Lititz.
	Lampeter,	Lampeter,	Lampeter,	Nov. 22-23,	
	Paradise,	Paradise,	Paradise,	Nov. 26-27,	
	Mechanicsville,	Manheim R. D.,	Mechanicsville,	Nov. 29-30,	
	Lititz,	Lititz,	Lititz,	Dec. 1-2,	
	Maytown,	Maytown,	Maytown,	Dec. 3-4,	
Lawrence,	Moravia,	Moravia,	Moravia,	Jan. 3-4,	Sylvester Shaffer, New Castle, R. D. No. 4.
	Plaingrove,	Plaingrove,	Brent,	Jan. 5-6,	
	Pulaski,	Pulaski,	Pulaski,	Jan. 7-8,	
Lebanon,	Schaefferstown,	Schaefferstown,	Richmond,	Jan. 3-4,	Edward Shuey, Annville, R. D.
	Annville,	Annville,	Annville,	Jan. 5-6,	
	Jonestown,	Jonestown,	Jonestown,	Jan. 7-8,	
Lehigh,	Pleasant Corner,	Jordan,	Germansville,	Jan. 17-18,	P. S. Fenstermacher, Allentown.
	Seipstown,	Breinigsville R. D.,	Allentown,	Jan. 19-20,	
	Macungie,	Macungie,	Macungie,	Jan. 21-22,	
Luzerne,	Hobbie,	Wapwallopen, R. D.,	Wapwallopen,	Dec. 13-14,	J. E. Hildebrant, Dallas.
	Bloomingdale,	Bloomingdale,	Shickshinny,	Dec. 15-16,	
	Dallas,	Dallas,	Dallas,	Dec. 17-18,	
Lycoming,	Friedens Church,	Jersey Shore,	Jersey Shore,	Feb. 29,	B. F. Kahler, Hughesville.
	Montgomery,	Montgomery,	Montgomery,	March 1-2,	
	Hughesville,	Hughesville,	Hughesville,	March 3-4,	
McKean,	Kane,	Kane,	Kane,	Nov. 15-16,	E. A. Studholme, Smethport.
	Ceres,	Ceres,	Olean, N. Y.,	Nov. 17-18,	
Mercer,	Greenville,	Greenville,	Greenville,	Jan. 10-11,	Wm. C. Black, Mercer.
	Mercer,	Mercer,	Mercer,	Jan. 12-13,	
	London,	Grove City,	Grove City,	Jan. 14-15,	
Mifflin,	McVeytown,	McVeytown,	McVeytown,	Feb. 11-12,	C. M. Smith, Lewistown.
	Milroy,	Milroy,	Milroy,	Feb. 14-15,	

Monroe,	Monroe Grange,	Stroudsburg,	Stroudsburg,	Nov. 18-19,	F. S. Brong, Saylorsburg.
	Tannersville,	Taunersville,	Tannersville,	Nov. 20,	
	Gilbert,	Gilbert,	Kunkletown,	Nov. 22-23,	
Montgomery,	Plymouth Meeting,	Plymouth Meeting,	Norristown,	Feb. 9,	J. H. Schultz, Norristown.
	Worcester,	Worcester,	Norristown,	Feb. 10-11,	
	Harleysville,	Harleysville,	Salford,	Feb. 12,	
	Trappe,	Trappe,	Collegeville,	Feb. 14-15,	
	East Greenville,	East Greenville,	East Greenville,	Feb. 16-17,	
Montour,	(Movable Institute School), Mausdale,	Mausdale,	Mausdale,	Jan. 7-11,	J. Miles Derr, Milton, R. D. No. 1.
Northampton,	Nazareth,	Nazareth,	Nazareth,	Jan. 10-11,	C. S. Messinger, Tatamy.
	Mount Bethel,	Mount Bethel,	Portland,	Jan. 12-13,	
	Cherryville,	Cherryville,	Treichlers,	Jan. 14-15,	
Northumberland,	Rebuck,	Rebuck,	Herndon,	March 1-2,	I. A. Eschbach, Milton, R. D. No. 1.
	McEwensville,	McEwensville,	McEwensville,	March 3-4,	
	Elysburg,	Elysburg,	Parinos,	March 6,	
Philadelphia,	Philadelphia,	Philadelphia,	Philadelphia,	Feb. 23-24,	David Rust, Horticultural Hall, Phila.
Perry,	Ickesburg,	Ickesburg,	Greenpark,	Dec. 20-21,	C. M. Bower, Blain.
	Greenpark,	Greenpark,	Greenpark,	Dec. 22-23,	
Pike,	Greentown,	Greentown,	Gouldsboro,	Jan. 17-18,	B. F. Killam, Paupack.
	Paupack,	Paupack,	Hawley,	Jan. 19-20,	
	Egypt Mills,	Egypt Mills,	Bushkill,	Jan. 21-22,	
Potter,	Oswayo,	Oswayo,	Oswayo,	Nov. 19-20,	A. T. Crittenden, Oswayo.
	Genesee,	Genesee,	Genesee,	Nov. 22-23,	
	Ulysses,	Ulysses,	Ulysses,	Nov. 24,	
Schuylkill,	Summit,	Summit,	Hammond,	Jan. 3-4,	John Shoener, Orwigsburg, R. D. No. 1.
	Klingerstown,	Klingerstown,	Herndon,	Jan. 5,	
	Pitman,	Pitman,	Locustdale,	Jan. 6,	
	Andreas,	Sittler,	Andreas,	Jan. 7-8,	
Snyder,	Middleburg,	Middleburg,	Middleburg,	Feb. 21-22,	F. F. Glass, Freeburg.
	Mt. Pleasant Mills,	Mt. Pleasant Mills,	Middleburg,	Feb. 23-24,	
Somerset,	Boswell,	Boswell,	Boswell,	Jan. 5,	Robt. W. Lohr, Boswell.
	Stoyestown,	Stoyestown,	Stoyestown,	Jan. 6,	
	Somerset,	Somerset,	Somerset,	Jan. 7-8,	
	Berlin,	Berlin,	Berlin,	Jan. 10-11,	
Sullivan,	Muncy Valley,	Muncy Valley,	Muncy Valley,	Dec. 10-11,	G. Eugene Bown, Forksville.
	Colley,	Colley,	Dushore,	Dec. 13-14,	
Susquehanna,	Dimock,	Dimock,	Dimock,	Jan. 3,	E. E. Tower, Hallstead.
	Harford,	Harford,	Kingsley,	Jan. 4-5,	
	Clifford,	Clifford,	Carbondale,	Jan. 6,	
	Thompson,	Thompson,	Thompson,	Jan. 7-8,	

DIVISION OF INSTITUTES—Continued.

County.	Place.	Post Office.	Railroad Station.	Date.	Chairman of Institutes.
Tioga,	Westfield,	Westfield,	Westfield,	Nov. 26-27,	C. H. DeWitt, Mansfield.
	Wellsboro,	Wellsboro,	Wellsboro,	Nov. 29-30,	
	Jobs Corner,	Jacksou Summit,	Jacksou Summit,	Dec. 1,	
	Mansfield,	Mansfield,	Mansfield,	Dec. 2-3,	
	Liberty,	Liberty,	Blossburg,	Dec. 4,	
Uuion,	Hartleton,	Hartletou,	Millmont,	Feb. 25-26,	J. Newtown Glover, Vicksburg.
	White Deer Cburcb,	Lewisburg,	West Milton,	Feb. 28-29,	
Venango,	Rockland,	Franklin,	Franklin,	Feb. 14-15,	W. A. Crawford, Cooperstown.
	Dempseytown,	Franklin,	Frankliu,	Feb. 16-17,	
Warren,	Sugargrove,	Sugargrove,	Youngsville,	Feb. 1-2,	R. J. Weld, Sugargrove.
	Youngsville,	Youugsville,	Youngsville,	Feb. 3,	
	Warren,	Warren,	Warren,	Feb. 4-5,	
Wasbington,	Scenery Hill,	Scenery Hill,	Washington,	Nov. 15-16,	Jas. M. Paxton, Houston.
	Ginger Hill,	Monongahela,	Monongahela,	Nov. 17-18,	
	Old Concord,	Dunns Station,	Waynesburg,	Nov. 19-20,	
Wayne,	Orson,	Orson,	Orson,	Jan. 10,	W. E. Perbam, Varden.
	Pleasant Mt.,	Pleasant Mt.,	Pleasant Mt.,	Jan. 11-12,	
	Aldenville,	Aldenville,	Honesdale,	Jan. 13,	
	Honesdale,	Honesdale,	Honesdale,	Jan. 14-15,	
Westmoreland,	Scottdale,	Scottdale,	Scottdale,	Dec. 17-18,	W. F. Holtzer, Greensburg.
	Irwin,	Irwin,	Irwin,	Dec. 20,	
	Greensburg,	Greensburg,	Greensburg,	Dec. 21-22,	
	Latrobe,	Latrobe,	Latrobe,	Dec. 23,	
Wyoming,	Tunkbannock,	Tunkhannock,	Tunkbannock.	Dec. 20-21,	G. A. Benson, Tuukhannock.
	East Lemon,	East Lemon,	Tunkhannock,	Dec. 22-23,	
York,	Cross Roads,	Felton R. D.,	Felton,	Feb. 7-8,	G. F. Barnes. Rossville.
	Stewartstown,	Stewartstown,	Stewartstown,	Feb. 9-10,	
	New Freedom,	New Freedom,	New Freedom,	Feb. 11-12,	
	Dover,	Dover,	York,	Feb. 14-15,	
	Loganville,	Loganville,	York,	Feb. 16-17,	
	Red Lion,	Red Lion,	Red Lion,	Feb. 18-19,	

PENNSYLVANIA FARMERS' INSTITUTES

ASSIGNMENTS OF LECTURERS BY SECTIONS FOR 1915-16.

FIRST SECTION

SHELDON W. FUNK will attend all meetings in this section.

Date.	Place.	County.	Additional Lecturers.
Nov. 19-20,	Blue Ball,	Lancaster,	Prof. F. S. Putney and C. M. Barnitz.
Nov. 22-23,	Lampeter,	Lancaster,	Prof. F. S. Putney and C. M. Barnitz.
Nov. 26-27,	Paradise,	Lancaster,	Prof. F. S. Putney and C. M. Barnitz.
Nov. 29-30,	Mechanicsville,	Lancaster,	Prof. Wells W. Cooke, C. M. Barnitz and C. E. Myers.
Dec. 1-2,	Lititz,	Lancaster,	Prof. Wells W. Cooke, C. M. Barnitz and. C. E. Myers.
Dec. 3-4,	Maytown,	Lancaster,	Prof. Wells W. Cooke, C. M. Barnitz and C. E. Myers.
Dec. 13-14,	Arendtsville,	Adams,	E. L. Phillips and Paul I. Wrigley.
Dec. 15-16,	Fairfield,	Adams,	E. L. Phillips and Paul I Wrigley.
Dec. 17-18,	New Oxford,	Adams,	E. L. Phillips and Paul I. Wrigley.
Dec. 20-21,	Ickesburg,	Perry,	E. L. Phillips and Paul I. Wrigley.
Dec. 22-23,	Greenpark,	Perry,	E. L. Phillips and Paul I. Wrigley.
Jan. 3-4,	Schaefferstown,	Lebanon,	Raymond S. Smith and H. M. Anderson.
Jan. 5-6,	Annville,	Lebanon,	Raymond S. Smith and H. M. Anderson.
Jan. 7-8,	Jonestown,	Lebanon,	Raymond S. Smith and H. M. Anderson.
Jan. 10-11,	Dry Run,	Franklin,	E. L. Phillips and H. M. Anderson.
Jan. 12-13,	Fannettsburg,	Franklin,	E. L. Phillips and H. M. Anderson.
Jan. 14,	Marion,	Franklin,	E. L. Phillips and H. M. Anderson.
Jan. 15,	Scotland,	Franklin,	E. L. Phillips and H. M. Anderson.
Jan. 17-18,	Newburg,	Cumberland,	E. L. Phillips and Prof. Franklin Menges.
Jan. 19-20,	Centerville,	Cumberland,	E. L. Phillips and Prof. Franklin Menges.
Jan. 21-22,	Hogestown,	Cumberland,	E. L. Phillips and Prof. Franklin Menges.
Jan. 31-Feb. 1,	Gratz,	Dauphin,	E. L. Phillips and S. C George.
Feb. 2-3,	Halifax,	Dauphin,	E. L. Phillips and S. C. George.
Feb. 4-5,	Linglestown,	Dauphin,	E. L. Phillips and S. C. George.
Feb. 7-8,	Cross Roads,	York,	E. L. Phillips and R. J. Weld.

Date.	Place.	County.	Additional Lecturers.
Feb. 9-10,	Stewartstown,	York,	E. L. Phillips and R. J. Weld.
Feb. 11-12,	New Freedom,	York,	E. L. Phillips and R. J. Weld.
Feb. 14-15,	Dover,	York,	E. L. Phillips and Chas. F. Noll.
Feb. 16-17,	Loganville,	York,	E. L. Phillips and Chas. F. Noll.
Feb. 18-19,	Red Lion,	York,	E. L. Phillips and Chas. F. Noll.
Feb. 21-22,	Bally,	Berks,	E. L. Phillips and L. W. Lighty.
Feb. 23-24,	Mt. Aetna,	Berks,	E. L. Phillips and L. W. Lighty.
Feb. 25-26,	Temple,	Berks,	E. L. Phillips and L. W. Lighty.
Feb. 28,	Jacksonwald,	Berks,	E. L. Phillips and L. W. Lighty.
Feb. 29,	Geigertown,	Berks,	E. L. Phillips and L. W. Lighty.
March 1-2,	Cedarville,	Chester,	E. L. Phillips and L. W. Lighty.
March 3-4,	Beyers,	Chester,	E. L. Phillips and L. W. Lighty.
March 6-7,	Parkesburg,	Chester,	E. L. Phillips and L. W. Lighty.
March 8-9,	Doe Run,	Chester,	E. L. Phillips and L. W. Lighty.

SECOND SECTION

D. H. WATTS will attend all meetings in this section.

Date.	Place.	County.	Additional Lecturers.
Nov. 19-20,	Ohiopyle,	Fayette,	C. R. Orton and J. Stuart Groupe.
Nov. 22-23,	Old Frame,	Fayette,	C. R. Orton and J. Stuart Groupe.
Nov. 24,	Tippecanoe,	Fayette,	C. R. Orton and J. Stuart Groupe.
Nov. 26,	Elders Ridge,	Indiana,	C. C. McCurdy and J. Stuart Groupe.
Nov. 27,	Shelocta,	Indiana,	C. C. McCurdy and J. Stuart Groupe.
Nov. 29-30,	Flora,	Indiana,	C. C. McCurdy and J. Stuart Groupe.
Dec. 1-2,	Pine Flats,	Indiana,	C. C. McCurdy and J. Stuart Groupe.
Dec. 3-4,	Wilgus,	Indiana,	C. C. McCurdy and J. Stuart Groupe.
Dec. 13-14,	Millheim,	Center,	M. H. McCallum, W. Theo. Wittman and S. I. Bechdel.
Dec. 15-16,	Pine Grove Mills,	Center,	M. H. McCallum, W. Theo. Wittman and S. I. Bechdel.
Dec. 17-18,	Pleasant Gap,	Center,	M. H. McCallum and W. Theo. Wittman.
Dec. 20-21,	Kylertown,	Clearfield,	M. H. McCallum and W. Theo. Wittman.
Dec. 22-23,	Troutville,	Clearfield,	M. H. McCallum and W. Theo. Wittman.
Dec. 24,	Hickory,	Clearfield,	M. H. McCallum and W. Theo. Wittman.
Jan. 3-4,	Benshoff Church,	Cambria,	M. H. McCallum and R. O. Umholtz.
Jan. 5,	Boswell,	Somerset,	M. H. McCallum and R. O. Umholtz.
Jan. 6,	Stoyestown,	Somerset,	M. H. McCallum and R. O. Umholtz.

Date.	Place.	County.	Additional Lecturers.
Jan.	7-8, Somerset,	Somerset,	M. H. McCallum and R. O. Umholtz.
Jan.	10-11, Berlin,	Somerset,	M. H. McCallum and R. O. Umholtz.
Jan.	12-13, Cessna,	Bedford,	M. H. McCallum and R. O. Umholtz.
Jan.	14-15, Loysburg,	Bedford,	M. H. McCallum and W. Theo. Wittman.
Jan.	17, Mench,	Bedford,	M. H. McCallum and W. Theo. Wittman.
Jan.	18-19, Rehobeth,	Fulton,	M. H. McCallum and W. Theo. Wittman.
Jan.	20, Clear Ridge,	Fulton,	M. H. McCallum and W. Theo. Wittman.
Jan.	21, Enid,	Fulton,	M. H. McCallum and W. Theo. Wittman.
Jan.	22, Saltillo,	Huntingdon,	M. H. McCallum and W. Theo. Wittman.
Feb.	1-2, Geeseytown,	Blair,	M. H. McCallum and W. Theo. Wittman.
Feb.	3-4, Newry,	Blair,	M. H. McCallum and W. Theo. Wittman.
Feb.	5, Bellwood,	Blair,	M. H. McCallum and W. Theo. Wittman.
Feb.	7-8, Warriors Mark,	Huntingdon,	M. H. McCallum and W. Theo. Wittman.
Feb.	9-10, Marklesburg,	Huntingdon,	M. H. McCallum and W. Theo. Wittman.
Feb.	11-12, McVeytown,	Mifflin,	M. H. McCallum and W. Theo. Wittman.
Feb.	14-15, Milroy,	Mifflin,	M. H. McCallum and W. Theo. Wittman.
Feb.	16-17, Richfield,	Juniata,	M. H. McCallum and W. Theo. Wittman.
Feb.	18-19, Port Royal,	Juniata,	M. H. McCallum and W. Theo. Wittman.
Feb.	21-22, Middleburg,	Snyder,	John W. White and W. Theo. Wittman.
Feb.	23-24, Mt. Pleasant Mills,	Snyder,	John W. White and W. Theo. Wittman.
Feb.	25-26, Hartleton,	Union,	John W. White and W. Theo. Wittman.
Feb.	28-29, White Deer Church,	Union,	Vern T. Struble and W. Theo. Wittman.
March	1-2, Rebuck,	Northumberland,	Vern T. Struble and W. Theo. Wittman.
March	3-4, McEwensville,	Northumberland,	Vern T. Struble and W. Theo. Wittman.
March	6, Elysburg,	Northumberland,	Vern T. Struble and W. Theo. Wittman.

THIRD SECTION

E. B. DORSETT will attend all meetings in this section.

Date.	Place.	County.	Additional Lecturers.
Nov.	15-16, Scenery Hill,	Washington,	F. H. Fassett and J. A. Herman.
Nov.	17-18, Ginger Hill,	Washington,	F. H. Fassett and J. A. Herman.
Nov.	19-20, Old Concord,	Washington,	F. H. Fassett and J. A. Herman.
Nov.	22-23, HanoverU.P. Church,	Beaver,	F. H. Fassett and J. A. Herman.
Nov.	24-25, Ohio Grange Hall,	Beaver,	F. H. Fassett and J. A. Herman.
Nov.	26-27, Chippewa Grange Hall,	Beaver,	F. H. Fassett and J. A. Herman.
Nov.	29-30, Millerstown,	Allegheny,	F. H. Fassett and J. A. Herman.

Date.	Place.	County.	Additional Lecturers.
Dec. 1-2,	Perrysville,	Allegheny,	F. H. Fassett and J. A. Herman.
Dec. 3-4,	Mt. Union,	Allegheny,	F. H. Fassett and J. A. Herman.
Dec. 13-14,	Jefferson,	Greene,	Robt. S. Seeds and E. L. Worthen.
Dec. 15-16,	Mt. Pleasant Church,	Greene,	Robt. S. Seeds and E. L. Worthen.
Dec. 17-18,	Scottdale,	Westmoreland,	Robt. S. Seeds and E. L. Worthen.
Dec. 20,	Irwin,	Westmoreland,	Robt. S. Seeds and T. J. Philips.
Dec. 21-22,	Greensburg,	Westmoreland,	Robt. S. Seeds and T. J. Philips.
Dec. 23,	Latrobe,	Westmoreland,	Robt. S. Seeds and T. J. Philips.
Jan. 3-4,	Moravia,	Lawrence,	Robt. S. Seeds and C. M. Barnitz.
Jan. 5-6,	Plaingrove,	Lawrence,	Robt. S. Seeds and C. M. Barnitz.
Jan. 7-8,	Pulaski,	Lawrence,	Robt. S. Seeds and C. M. Barnitz.
Jan. 10-11,	Greenville,	Mercer,	Geo. S. Bulkley and C. M. Barnitz.
Jan. 12,	Mercer,	Mercer,	Geo. S. Bulkley and C. M. Barnitz.
Jan. 13,	Mercer,	Mercer,	Prof. W. H. Tomhave and C. M. Barnitz.
Jan. 14-15,	London,	Mercer,	F. H. Fassett and Fred W. Card.
Jan. 17-18,	Prospect,	Butler,	F. H. Fassett and Fred W. Card.
Jan. 19-20,	Bruin,	Butler,	F. H. Fassett and Fred W. Card.
Jan. 21-22,	Evans City,	Butler,	F. H. Fassett and Fred W. Card.
Jan. 31-Feb. 1,	Spring Church,	Armstrong,	F. H. Fassett and Fred W. Card.
Feb, 2-3,	Brick Church,	Armstrong,	F. H. Fassett and Fred W. Card.
Feb. 4-5,	Cowansville,	Armstrong,	F. H. Fassett and Fred W. Card.
Feb. 7-8,	Clarion,	Clarion,	F. H. Fassett, Fred W. Card and Dr. Hannah McK. Lyons.
Feb. 9,	Miola,	Clarion,	F. H. Fassett, Fred W. Card and Dr. Hannah McK. Lyons.
Feb. 10,	Frogtown,	Clarion,	F. H. Fassett, Fred W. Card and Dr. Hannah McK. Lyons.
Feb. 11-12,	Sligo,	Clarion,	F. H. Fassett, Fred W. Card and Dr. Hannah McK. Lyons.
Feb. 14-15,	Rockland,	Venango,	F. H. Fassett, Fred W. Card and Geo. E. Hull.
Feb. 16-17,	Dempseytown,	Venango,	F. H. Fassett, Fred W. Card and Geo. E. Hull.
Feb. 18-19,	Cochranton,	Crawford,	F. H. Fassett, Fred W. Card and Geo. E. Hull.
Feb. 21-22,	Conneaut Lake,	Crawford,	F. H. Fassett and Fred W. Card.
Feb. 23-24,	Dieksonburg,	Crawford,	F. H. Fassett and Fred W. Card.
Feb. 25-26,	Townville,	Crawford,	F. H. Fassett and Fred W. Card.
Feb. 28-29,	West Green Grange Hall.	Erie,	F. H. Fassett and Fred W. Card.
March 1-2,	North East,	Erie,	F. H. Fassett and Fred W. Card.
March 3-4,	Girard,	Erie,	F. H. Fassett and Fred W. Card.

FOURTH SECTION

WM. M. PATTON will attend all meetings in this section.

Date.	Place.	County.	Additional Lecturers.
Nov. 15-16,	Kane,	McKean,	Paul R. Guldin, Dr. M. E. Conard and L. W. Lighty.
Nov. 17-18,	Ceres,	McKean,	Paul R. Guldin, Dr. M. E. Conard and L. W. Lighty.
Nov. 19-20,	Oswayo,	Potter,	Paul R. Guldin, Dr. M. E. Conard and L. W. Lighty.
Nov. 22-23,	Genesee,	Potter,	Paul R. Guldin, Dr. M. E. Conard and L. W. Lighty.
Nov. 24,	Ulysses,	Potter,	Paul R. Guldin, Dr. M. E. Conard and L. W. Lighty.
Nov. 26-27,	Westfield,	Tioga,	Geo. L. Gillingham and L. W. Lighty.
Nov. 29-30,	Wellsboro,	Tioga,	Geo. L. Gillingham and L. W. Lighty.
Dec 1,	Jobs Corner,	Tioga,	Geo. L. Gillingham and L. W. Lighty.
Dec. 2-3,	Mansfield,	Tioga,	Geo. L. Gillingham and L. W. Lighty.
Dec. 4,	Liberty,	Tioga,	Geo. L. Gillingham and L. W. Lighty.
Dec. 10-11,	Muncy Valley,	Sullivan,	Geo. L. Gillingham and L. W. Lighty.
Dec. 13-14,	Colley,	Sullivan,	Geo. L. Gillingham and L. W. Lighty.
Dec. 15-16,	Wilmont,	Bradford,	Geo. L. Gillingham and L. W. Lighty.
Dec. 17-18,	Stevensville,	Bradford,	Geo. L. Gillingham and L. W. Lighty.
Dec. 20-21,	Lime Hill,	Bradford,	Geo. L. Gillingham and L. W. Lighty.
Dec. 22-23,	Rome,	Bradford,	Geo. L. Gillingham and L. W. Lighty.
Jan. 3,	Dimock,	Susquehanna,	H. M. Gooderham and Dr. W. T. Phillipy.
Jan. 4-5,	Harford,	Susquehanna,	H. M. Gooderham and Dr. W. T. Phillipy.
Jan. 6,	Clifford,	Susquehanna,	H. M. Gooderham and Dr. W. T. Phillipy.
Jan. 7-8,	Thompson,	Susquehanna,	H. M. Gooderham and Dr. W. T. Phillipy.
Jan. 10,	Orson,	Wayne,	H. M. Gooderham and Leon Otice Van Noy.
Jan. 11-12,	Pleasant Mount,	Wayne,	H. M. Gooderham and Leon Otice Van Noy.
Jan 13,	Aldenville,	Wayne,	H. M. Gooderham and Leon Otice Van Noy.
Jan. 14-15,	Honesdale,	Wayne,	H. M. Gooderham and Leon Otice Van Noy.
Jan. 17-18,	Greentown,	Pike,	H. M. Gooderham and Leon Otice Van Noy.
Jan. 19-20,	Paupack,	Pike,	H. M. Gooderham and Leon Otice Van Noy.
Jan. 21-22,	Egypt Mills,	Pike,	H. M. Gooderham and Leon Otice Van Noy.
Feb. 1-2,	Sugargrove,	Warren,	Prof. Wells W. Cooke and C. M. Barnitz.
Feb. 3,	Youngsville,	Warren,	Prof. Wells W. Cooke and C. M. Barnitz.
Feb. 4-5,	Warren,	Warren,	Prof. Wells W. Cooke and C. M. Barnitz.
Feb. 7-8,	Tionesta,	Forest,	Prof. Wells W. Cooke and C. M. Barnitz.
Feb. 9-10,	Clarington,	Forest,	Prof. Wells W. Cooke and C. M. Barnitz.

Date.	Place.	County.	Additioual Lecturers.
Feb. 11-12,	St. Marys,	Elk,	Prof. Wells W. Cooke and J. Stuart Groupe.
Feb. 14-15,	Weedville,	Elk,	Prof. Wells W. Cooke and J. Stuart Groupe.
Feb. 16-17,	Zion Church,	Jefferson,	Dr. Hannah McK. Lyons aud J. Stuart Groupe.
Feb. 18-19,	Beachwood,	Jefferson,	Dr. Haunah McK. Lyons and J. Stuart Groupe.
Feb. 21-22,	Emporium,	Cameron,	Dr. Hannah McK. Lyons and J. Stuart Groupe.
Feb. 23-24,	Woolrich,	Clintou,	Dr. Hauuah McK. Lyons and C. M. Barnitz.
Feb. 25-26,	Mackeyville,	Clinton,	Dr. Hannah McK. Lyons and C. C. Hulsart.
Feb. 28,	Loganton,	Clinton,	Dr. Hannah McK. Lyons and C. C. Hulsart.
Feb. 29,	Friedens Church,	Lycoming,	Dr. Hannah McK. Lyons, C. C. Hulsart and W. H. Stout.
March 1-2,	Montgomery,	Lycoming,	Dr. Hannah McK. Lyons, C. C. Hulsart and W. H. Stout.
March 3-4,	Hughesville,	Lycoming,	Dr. Hannah McK. Lyons, C. C. Hulsart aud W. H. Stout.

FIFTH SECTION

J. T. CAMPBELL will attend all meetings in this section.

Date.	Place.	County.	Additional Lecturers.
Nov. 18-19,	Monroe Grange,	Monroe,	Prof. T. I. Mairs and C. C. Hulsart.
Nov. 20,	Tannersville,	Monroe,	Prof. T. I. Mairs and C. C. Hulsart.
Nov. 22-23,	Gilbert,	Monroe,	Prof. T. I. Mairs and C. C. Hulsart.
Nov. 24-25,	Big Creek,	Carbon,	Fred W. Card, C. C. Hulsart aud Vern T. Struble.
Nov. 26-27,	Mahoning,	Carbon,	Fred W. Card, C. C. Hulsart aud Vern T. Struble.
Nov. 29-30,	Weatherly,	Carbon,	Fred W. Card, C. C. Hulsart and Vern T. Struble.
Dec. 1-2,	Daleville,	Lackawauna,	Fred W. Card, W. R. White and Vern T. Struble.
Dec. 3-4,	Tompkinsville,	Lackawanna,	Fred W. Card, W. R. White and Veru T. Struble.
Dec. 6-7,	Bald Mount,	Lackawanna,	Fred W. Card, W. R. White and Vern T. Struble.
Dec. 13-14,	Hobbie,	Luzerne,	Fred W. Card aud Vern T. Struble.
Dec. 15-16,	Bloomingdale,	Luzerne,	Fred W. Card and Vern T. Struble.
Dec. 17-18,	Dallas,	Luzerne,	Fred W. Card and Vern T. Struble.
Dec. 20-21,	Tunkhannock,	Wyoming.	Fred W. Card and Vern T. Struble.
Dec. 22-23,	East Lemon,	Wyoming.	Fred W. Card and Vern T. Struble
Jan. 3-4,	Summit,	Schuylkill,	John D. Herr, Prof. Franklin Menges and M. S. Bond.

Date.	Place.	County.	Additional Lecturers.
Jan. 5,	Klingerstown,	Schuylkill,	John D. Herr, Prof Franklin Menges and M S. Bond.
Jan. 6,	Pitman,	Schuylkill,	John D. Herr, Prof. Franklin Menges and M. S. Bond.
Jan. 7-8,	Andreas,	Schuylkill,	John D. Herr, Prof. Franklin Menges and M. S. Bond.
Jan. 10-11,	Nazareth,	Northampton,	John D. Herr, Prof. Franklin Menges and W. H. Darst.
Jan. 12-13,	Mount Bethel,	Northampton,	John D. Herr, Prof. Franklin Menges and W. H. Darst.
Jan. 14-15,	Cherryville,	Northampton,	John D. Herr, Prof. Franklin Menges and W. H. Darst.
Jan. 17-18,	Pleasant Corner,	Lehigh,	John D. Herr and R. J. Weld.
Jan. 19-20,	Seipstown,	Lehigh,	John D. Herr and R. J. Weld.
Jan. 21-22,	Macungie,	Lehigh,	John D. Herr and R. J. Weld.
Jan. 31-Feb. 1,	Springtown,	Bucks,	John D. Herr and Leon Otice Van Noy.
Feb. 2-3,	Sellersville,	Bucks,	John D. Herr and Leon Otice Van Noy.
Feb. 4,	Bristol,	Bucks,	John D. Herr and Leon Otice Van Noy.
Feb. 5,	New Hope,	Bucks,	John D. Herr and Leon Otice Van Noy.
Feb. 7-8,	Newtown,	Bucks,	John D. Herr and Leon Otice Van Noy.
Feb. 9,	Plymouth Meeting,	Montgomery,	Leon Otice Van Noy and C. C. Hulsart.
Feb. 10-11,	Worcester,	Montgomery,	Leon Otice Van Noy and C. C. Hulsart.
Feb. 12,	Harleysville,	Montgomery,	Leon Otice Van Noy and C. C. Hulsart.
Feb. 14-15,	Trappe,	Montgomery,	Leon Otice Van Noy and C. C. Hulsart.
Feb. 16-17,	East Greenville,	Montgomery,	Leon Otice Van Noy and C. C. Hulsart.
Feb. 18-19,	Village Green,	Delaware,	Leon Otice Van Noy and C. C. Hulsart.
Feb. 21-22,	Williamson School,	Delaware,	Leon Otice Van Noy and C. C. Hulsart.
Feb. 23-24,	Philadelphia,	Philadelphia,	Leon Otice Van Noy and C. C. Hulsart.

MOVABLE INSTITUTE SCHOOLS

DIRECTIONS TO COUNTY CHAIRMEN AND COMMITTEES OF ARRANGEMENTS

The following outline of Dairy, Horticultural and Poultry Topics form the basis of such instruction as will be taken up at the Movable Institute Schools. At a four-day meeting, two days will be devoted to Dairy Instruction and two days divided between Horticulture and Poultry interests. In preparing program, please select such topics as will be best suited for your locality, arranging for the speakers on such days as they are scheduled in Institute Bulletin. We recommend that at least one session relating to the Dairy Barn, Its Ventilation, etc., be held in a suitable Dairy Barn, also that one Horticultural session be held in a nearby Orchard, if the weather will permit. A lady speaker will be in attendance at one or more days at each school to give instruction on Household Economics, Home Sanitation and Domestic Science and should be placed on program for evening session.

SCHOOL OF HORTICULTURE

Session I

Starting an Orchard:
- Care and management
- Pruning; how, when and what for
- Spraying and marketing.

Root System:
- Structure of root
- Functions
- Absorption of food
- Conduction
- Effect of root pruning
- Root injury.

Trunk and Branches:
- Structure of stem
- What is cambium
- Function of stem
- Buds
- Relative to pruning.

Session II

How to Feed a Tree:
- Fertilizers
- Barnyard manure
- Wood ashes

Lime
Commercial fertilizers
Mulches-sod mulches
Cultivation
Cover crops.

Session III

Varieties of Fruits:
Top working varieties
Adaptation of varieties
Importance of local varieties
Change of latitude
Self sterility of fruits
Mixing varieties of orchards
How to choose varieties
Types of apples.

Session IV

BUSINESS PROBLEMS OF THE ORCHARD

Subject—*Harvesting and Marketing Fruit.*
When to pick and how
Picking devices
Effect of sun on picked fruit
Effect of rain on picked fruit
Effect of frost on picked fruit
Packing and packages
Packing houses and conveniences
Storing and storing houses
Shipping—associations
Demands of the market
Value of business methods
Value of co-operation.
Practicum—To be announced.

Session V

Orchard Insects:
Codling moth
Apple tree borer
Scale insects
Canker worm
Peach tree borer
Curculio
Rose chafer.

Session VI

Fungus Diseases:
- Apple scale
- Apple leaf spot
- Apple rust
- Apple twig blight
- Apple canker
- Crown gall
- Peach yellows
- Leaf curl
- Brown rot
- Pear tree blight
- Pear leaf blight.

Strawberries:

SCHOOL OF DAIRYING

Subject—*The Dairy Barn.*
- Plan and arrangement
- Its convenience
- Tools and implements, where kept and what are needed.
- The cow stall
- Material of stall
- The dimensions
- The floor drop
- Manure gutter; how made.

Practicum—An hour will be devoted to the examination of the Dairy Barn.

Subject—*Light.*
- Windows, where located
- How constructed
- Effect upon the animal.

Subject—*Ventilation.*
- A suitable intake system
- The outlet for air
- Convenient arrangement of doors and chutes
- Ceiling construction.

Subject—*Profitable Feeding.*
- Short cut hay, fodder and ensilage
- Ground grain and products of mills
- Balance the feed to suit the cow
- How to balance a ration
- How to count profit and loss in feeding
- Best hay, fodder and silage
- How often should cows be fed.

Subject—*Care and Management of the Cow.*
How to keep a cow warm in winter
How to water and salt a cow
How to curry, bed and clean a cow.

Subject—*The Dairy Cow.*
Selection of breed adapted to climatic and soil conditions
Her breeding; the sire and dam
Conformation
The proper formed udder and teats.

Subject—*Raising the Calf.*
What does it cost to raise a calf to be a cow
How fed
When fed
What shall constitute the feed.

Practice in testing milk products.

Testing of samples to show variations daily, time of milking first and last milk, daily, speed temperature, flushing.

Butter judging, acid test, fermentations.

Test three-day comp. samples from different herds. Cows to be in pairs same time in milk.

Lecture on cream ripening with cream to be set.

Churning and packing for market accompanying by explanation.

EXERCISE I

BABCOCK TEST: The quality of milk and cream depends largely on the butter-fat in it.
To learn the amount of fat find the weight of milk and the per cent. of fat.
The Babcock Test merely tells what per cent. of the material is fat.

THE PRINCIPLE: The breaking up of the milk, or cream, etc., by sulphuric acid setting the fat free; separating it from the other constituents by means of centrifugal force, this being done in a bottle graduated to show the per cent. of fat.

VITAL: Features are a fair sample, an accurate measure of the amount used, complete separation, and accurate reading of the results, at proper temperature.

THE MILK: To be tested, fair sample, thoroughly mixed, pouring if practicable, sample measured with a pipette, 17.6 c. c. See that end is not broken. Milk should be ordinary room temperature.

THE ACID: Commercial sulphuric, strength, 1:82 sp. gr.; amount, 17.5 c. c.

Strong acid chars the fat—use less of it.

Weak acid shows white sediment in fat column, use more of it.

Slant bottle so ingoing acid runs down side of bottle. Mix with the milk at once.

Whirl five minutes, add hot water up to neck, whirl one minute, add water to 8 mark, whirl one minute, read. If using hand tester and room is cool, place bottle in bath at 120 for two or three minutes before reading.

Read from top of upper meniscus to bottom of lower.

Empty while warm, rinse, wash with alkali water, rinse.

CREAM: To test it the amount required should be weighed into the sample bottle, because the variation in its richness, the amount that will adhere to the pipette and the gas and air mixed in it by hauling or standing, make it impossible to measure the required amount accurately. The amount, 18 grains, or half this amount, in the latter case, with the ordinary cream bottle the reading would have to be doubled.

The amount of aid used with cream should be reduced a little, and after it is mixed with the cream should be allowed to stand a few minutes.

SKIM MILK: Tested the same as whole milk, except that a little more acid is required. The speed of the tester should be increased. A double neck skim milk bottle is required, especially for separator skim milk.

EXERCISE II

The per cent. of fat in milk varies with different cows, with different breeds, with the same cow from day to day, from one milking to another, with change of feed, change of weather, fright, abuse, noise that is unusual, if not accustomed to them, the presence of strangers at milking time may cause variation. The per cent. of fat in the milk is usually lower soon after the cow is fresh, than it is later in the period of lactation; with many cows the per cent. of increase slightly as the cow gets older. It is usually highest for the shortest period between milkings, and when these are equal for the one during which there has been most activity. The per cent. of fat is more influenced by nervous condition of the animal and individuality than by feed.

In separator cream, the per cent. of fat varies, because of variation of the per cent. of fat in the milk separated, temperature of milk at separating time, fullness of the supply can, speed of the separator, the amount of skim milk, or water, used in flushing the bowl.

In separator skim milk the increased per cent. of fat may be due, slow speed of separator, cold milk, irregular speed, machine not standing steady and firm.

EXERCISE III

Scoring butter according to a score card, is but expressing in mathematical terms, the quality of butter. As yet no way has been devised for measuring the quality of butter, except to depend on the judgment of those skilled in the work. The score card:

Flavor,	45
Body,	25
Color,	15
Salt,	10
Style,	5
Total,	100

FLAVOR: Should be mild rich creamy, with a delicate mild pleasant aroma.

Some of the common faults of flavor; flat, lacking in the flavor due to proper development of the lactic acid, rancid due to over ripe cream, old cream, unclean, showing the effect of unclean milking, unclean utensils, surroundings, or methods. Weedy presence of flavors probably caused by undesirable feeds. Feverish, from milk from cows not in good health or too soon after freshening, or during sexual excitement. Smothered, due to closing the can of milk before properly cooling, or exposing closed can of milk to hot sun enroute to creamery. Fruity, or vegetables flavors, caused by presence of decaying vegetables or fruit. Dish rag, due to wiping utensils with the dish cloth, instead of thoroughly scalding with boiling water and allowing to dry.

BODY: Should be firm and wavy, not brittle, greasy, tallowy, spongy, sticky, or salvy.

COLOR: Should be uniform and even, free from streaks, mottles, curds.

SALT: Should be of desired amount, thoroughly dissolved, free from grit and evenly distributed.

STYLE: Package should be neat, clean, and tight.

EXERCISE IV

This exercise to be devoted to testing samples of milk brought in by members of the class, and taken so as to show the difference in the variations in the composition of milk. To emphasize the value of knowing what each cow is producing in return for the feed she is consuming, to show how an approximate record may be kept with little real work.

Material required for keeping such records.

A spring balance, good one costs $4.00 though a much cheaper one will answer fairly well.

Sample jars, one for each cow, may be common fruit jars or milk jars, but should have covers.

A Babcock Tester that need not cost over $5.00.

The discovery of and removal from the herd of one or two cows that are eating more dollars worth of grain, hay and pasture than they are producing milk and butter fat to pay for will many times over pay for the labor and expense involved, especially when it is recalled that some cows produce $75.00 and $80.00 worth of butter fat for $35.00 or $40.00 worth of feed.

EXERCISE V

Principles of Sanitary Milk Production.
Facts of Value to Dairymen about Bacteria in Milk.

A milk sheet, which may be ruled up on common brown paper as follows:

DATE.	Name of Cow.	Name of Cow.	Name of Cow.	Name of Cow.	

SCHOOL OF POULTRY HUSBANDRY

Subject—*Breeds.*

Short history of the various breeds. Origin, types and future advantages of pure bred flocks.
Principals of breeding, particularly along the line of increased egg production.
Effects of selection, cross-breeding, line breeding and inbreeding.

Subject—*Foods and Feeding.*

Purposes of feeding.
Comparative value of the various grains.
How best to feed and when.
Feeding for eggs, for growth, for fattening, etc.
Green food, animal food, shell and bone food, charcoal condiments.

Subject—*Houses and Yards.*

Colony, continuous house and free range plans.
Situations, soils and exposures.
Advantages of low cost, construction and simplicity.
Wide open and curtain front, fresh air houses.

Subject—*Easy and Simple Methods of Poultry Keeping.*

Why such methods are best.
Where most people fall down.
Advantages of poultry keeping; vast importance and extent of same.

Subject—*Incubation.*

The advantages and disadvantages of natural and artificial incubation compared.
Necessary adjuncts of good hatches.

Subject—*Brooding and Rearing.*

Natural methods of brooding.
Cold brooders; artificially heated brooders.
The first feed for chicks.
Extreme importance and desirability of uninterrupted or unchecked growth.

Subject—*Winter Egg Production.*

Factors making the same.
Selecting and handling the layers.
Housing and feeding.
Marketing the eggs.

Note—Besides the list of the various Poultry Journals and the bulletins on Poultry Keeping issued by the National and various State Departments of Agriculture, those interested in Poultry Keeping should secure and study Poultry Craft, by Robinson; Progressive Poultry Culture, by Bingham; The New Book on Poultry, by Wright; Poultry Culture, by Felch; and A Living from Poultry, by Boyer.

MOVABLE INSTITUTE SCHOOLS

Season 1915-1916.

Date.	Place.	County.	Lecturers.
Jan. 4-5,	Jerseytown,	Columbia,	W. Theo. Wittman and F. H. Fassett.
Jan. 6,	Jerseytown,	Columbia,	Dr. M. E. Conard, R. J. Weld and Dr. Hannah McK. Lyons.
Jan. 6,	Numidia,	Columbia,	W. Theo. Wittman and F. H. Fassett.
Jan. 7-8,	Numidia,	Columbia,	Dr. M. E. Conard, R. J. Weld and Dr. Hannah McK. Lyons.
Jan. 7-8,	Mausdale,	Montour,	W. Theo. Wittman and F. H. Fassett.
Jan. 10-11,	Mausdale,	Montour,	Dr. M. E. Conard, R. J. Weld and Dr. Hannah McK. Lyons.
Jan. 10-11,	Salix,	Cambria,	W. Theo. Wittman and F. H. Fassett.
Jan. 12-13,	Salix,	Cambria,	Dr. M. E. Conard, R. J. Weld and Dr. Hannah McK. Lyons.

LIST OF SPEAKERS AND THEIR ASSIGNMENTS

FOR SEASON OF 1915-1916.

H. M. ANDERSON, New Park, York County, Pa.

Date.	Place.	County.
Jan. 3-4,	Schaefferstown,	Lebanon.
Jan. 5-6,	Annville,	Lebanon.
Jan. 7-8,	Jonestown,	Lebanon.
Jan. 10-11,	Dry Run,	Franklin.
Jan. 12-13,	Fannettsburg,	Franklin.
Jan. 14,	Marion,	Franklin.
Jan. 15,	Scotland,	Franklin.

C. M. BARNITZ, Riverside, Northumberland County, Pa.

Nov. 19-20,	Blue Ball,	Lancaster.
Nov. 22-23,	Lampeter,	Lancaster.
Nov. 26-27,	Paradise,	Lancaster.
Nov. 29-30,	Mechanicsville,	Lancaster.
Dec. 1-2,	Lititz,	Lancaster.
Dec. 3-4,	Maytown,	Lancaster.
Jan. 3-4,	Moravia,	Lawrence.
Jan. 5-6,	Plaingrove,	Lawrence.
Jan. 7-8,	Pulaski,	Lawrence.
Jan. 10-11,	Greenville,	Mercer.
Jan. 12-13,	Mercer,	Mercer.
Jan. 14-15,	London,	Mercer.
Feb. 1-2,	Sugargrove,	Warren.
Feb. 3,	Youngsville,	Warren.
Feb. 4-5,	Warren,	Warren.
Feb. 7-8,	Tionesta,	Forest.
Feb. 9-10,	Clarington,	Forest.
Feb. 23-24,	Woolrich,	Clinton.

G. C. BUCKLEY, State College, Centre County, Pa.

Jan. 10-11,	Greenville,	Mercer.
Jan. 12,	Mercer,	Mercer.

S. I. BECHDEL, Department of Dairy Husbandry, State College, Centre County, Pa.

	Date.	Place.	County.
Dec.	13-14,	Millheim,	Centre.
Dec.	15-16,	Pine Grove Mills,	Centre.

M. S. BOND, Danville, Montour County, Pa.

Jan	3-4,	Summit,	Schuylkill.
Jan.	5,	Klingerstown,	Schuylkill.
Jan.	6,	Pitman,	Schuylkill.
Jan.	7-8,	Andreas,	Schuylkill.

J. T. CAMPBELL, Hartstown, Crawford County, Pa.

Will attend all meetings in the FIFTH SECTION.

FRED W. CARD, Sylvania, Bradford County, Pa.

Will attend all meetings in the FIFTH SECTION Nov. 24 to Dec. 23, and the THIRD SECTION from Jan. 14 to March 4.

DR. M. E. CONARD, Westgrove, Chester County, Pa.

Nov.	15-16,	Kane,	McKean.
Nov.	17-18,	Ceres,	McKean.
Nov.	19-20,	Oswayo,	Potter.
Nov.	22-23,	Genessee,	Potter.
Nov.	24,	Ulysses,	Potter.
Jan.	6,	Jerseytown,	Columbia.
Jan.	7-8,	Numidia,	Columbia.
Jan.	10-11,	Mausdale,	Montour.
Jan.	12-13,	Salix,	Cambria.

PROF. WELLS W. COOKE, U. S. Dept. of Agriculture, Washington, D. C.

Nov.	29-30,	Mechanicsville,	Lancaster.
Dec.	1-2,	Lititz,	Lancaster.
Dec.	3-4,	Maytown,	Lancaster.
Feb.	1-2,	Sugargrove,	Warren.
Feb.	3,	Youngsville,	Warren.
Feb.	4-5,	Warren,	Warren.
Feb.	7-8,	Tionesta,	Forest.
Feb.	9-10,	Clarington,	Forest.
Feb.	11-12,	St. Marys,	Elk.
Feb.	14-15,	Weedville,	Elk.

W. H. DARST, State College, Centre County, Pa.

Date.	Place.	County.
Jan. 10-11,	Nazareth,	Northampton.
Jan. 12-13,	Mount Bethel,	Northampton.
Jan. 14-15,	Cherryville,	Northampton.

E. B. DORSETT, Mansfield, Tioga County, Pa.

Will attend all meetings in the THIRD SECTION.

F. H. FASSETT, Meshoppen, Wyoming County, Pa.

Will attend all meetings in the THIRD SECTION from Nov. 15 to Dec. 4, and Jan. 14 to March 4; Movable Institute Schools Jan. 4-5, Jerseytown, Jan. 6, Numidia, Jan. 7-8, Mausdale, Jan. 10-11, Salix.

SHELDON W. FUNK, Boyertown, Berks County, Pa.

Will attend all meetings in the FIRST SECTION.

S. C. GEORGE, West Lebanon, Indiana County, Pa.

Jan. 31-Feb. 1,	Gratz,	Dauphin.
Feb. 2-3,	Halifax,	Dauphin.
Feb. 4-5,	Linglestown,	Dauphin.

G. L. GILLINGHAM, Moorestown, N. J.

Nov. 26-27,	Westfield,	Tioga.
Nov. 29-30,	Wellsboro,	Tioga.
Dec. 1,	Jobs Corner,	Tioga.
Dec. 2-3,	Mansfield,	Tioga.
Dec. 4,	Liberty,	Tioga.
Dec. 10-11,	Muncy Valley,	Sullivan.
Dec. 13-14,	Colley,	Sullivan.
Dec. 15-16,	Wilmont,	Bradford.
Dec. 17-18,	Stevensville,	Bradford.
Dec. 20-21,	Lime Hill,	Bradford.
Dec. 22-23,	Rome,	Bradford.

H. M. GOODERHAM, Patton, Cambria County, Pa.

Date.	Place.	County.
Jan. 3,	Dimock,	Susquehanna.
Jan. 4-5,	Harford,	Susquehanna.
Jan. 6,	Clifford,	Susquehanna.
Jan. 7-8,	Thompson,	Susquehanna.
Jan. 10,	Orson,	Wayne.
Jan. 11-12,	Pleasant Mt.,	Wayne.
Jan. 13,	Aldenville,	Wayne.
Jan. 14-15,	Honesdale,	Wayne.
Jan. 17-18,	Greentown,	Pike.
Jan. 19-20,	Paupack,	Pike.
Jan. 21-22,	Egypt Mills,	Pike.

J. STUART GROUPE, Jersey Shore, Lycoming County, Pa.

Nov. 19-20,	Ohiopyle,	Fayette.
Nov. 22-23,	Old Frame,	Fayette.
Nov. 24,	Tippecanoe,	Fayette.
Nov. 26,	Elders Ridge,	Indiana.
Nov. 27,	Shelocta,	Indiana.
Nov. 29-30,	Flora,	Indiana.
Dec. 1-2,	Pine Flats,	Indiana.
Dec. 3-4,	Wilgus,	Indiana.
Feb. 11-12,	St. Marys,	Elk.
Feb. 14-15,	Weedville,	Elk.
Feb. 16-17,	Zion Church,	Jefferson.
Feb. 18-19,	Beachwood,	Jefferson.
Feb. 21-22,	Emporium,	Cameron.

PAUL R. GULDIN, Yellow House, Berks County, Pa.

Nov. 15-16,	Kane,	McKean.
Nov. 17-18,	Ceres,	McKean.
Nov. 19-29,	Oswayo,	Potter.
Nov. 22-23,	Genesee,	Potter.
Nov. 24,	Ulysses,	Potter.

J. A. HERMAN, Fombell, Beaver County, Pa.

Nov. 15-16,	Scenery Hill,	Washington.
Nov. 17-18,	Ginger Hill,	Washington.
Nov. 19-20,	Old Concord,	Washington.
Nov. 22-23,	Hanover U. P. Church,	Beaver.
Nov. 24-25,	Ohio Grange Hall,	Beaver.
Nov. 26-27,	Chippewa Grange Hall,	Beaver.

	Date.	Place.	County.
Nov.	29-30,	Millerstown,	Allegheny.
Dec.	1-2,	Perrysville,	Allegheny.
Dec.	3-4,	Mt. Union,	Allegheny.

JOHN D. HERR, Lancaster, Lancaster County, Pa.

Jan.	3-4,	Summit,	Schuylkill.
Jan.	5,	Klingerstown,	Schuylkill.
Jan.	6,	Pitman,	Schuylkill.
Jan.	7-8,	Andreas,	Schuylkill.
Jan.	10-11,	Nazareth,	Northampton.
Jan.	12-13,	Mount Bethel,	Northampton.
Jan.	14-15,	Cherryville,	Northampton.
Jan.	17-18,	Pleasant Corner,	Lehigh.
Jan.	19-20,	Seipstown,	Lehigh.
Jan.	21-22,	Macungie,	Lehigh.
Jan.	31-Feb. 1,	Springtown,	Bucks.
Feb.	2-3,	Sellersville,	Bucks.
Feb.	4,	Bristol,	Bucks.
Feb.	5,	New Hope,	Bucks.
Feb.	7-8,	Newtown,	Bucks.

C. C. HULSART, Matawan, N. J.

Nov.	18-19,	Monroe Grange,	Monroe.
Nov.	20,	Tannersville,	Monroe.
Nov.	22-23,	Gilbert,	Monroe.
Nov.	24-25,	Big Creek,	Carbon.
Nov.	26-27,	Mahoning,	Carbon.
Feb.	9,	Weatherly,	Carbon.
Nov.	29-30,	Plymouth Meeting,	Montgomery.
Feb.	10-11,	Worcester,	Montgomery.
Feb.	12,	Harleysville,	Montgomery.
Feb.	14-15,	Trappe,	Montgomery.
Feb.	16-17,	East Greenville,	Montgomery.
Feb.	18-19,	Village Green,	Delaware.
Feb.	21-22,	Williamson School,	Delaware.
Feb.	23-24,	Philadelphia,	Philadelphia.
Feb.	25-26,	Mackeyville,	Clinton.
Feb.	28,	Loganton,	Clinton.
Feb.	29,	Friedens Church,	Lycoming.
March	1-2,	Montgomery,	Lycoming.
March	3-4,	Hughesville,	Lycoming.

GEO. E. HULL, Sharpsville, Mercer County, Pa.

	Date.	Place.	County.
Jan.	14-15,	Rockland,	Venango.
Jan.	16-17,	Dempseytown,	Venango.
Jan.	18-19,	Cochranton,	Crawford.

L. W. LIGHTY, East Berlin, Adams County, Pa.

Nov.	15-16,	Kane.	McKean.
Nov.	17-18,	Ceres,	McKean.
Nov.	19-20,	Oswayo,	Potter.
Nov.	22-23,	Genessee,	Potter.
Nov.	24,	Ulysses,	Potter.
Nov.	26-27,	Westfield,	Tioga.
Nov.	29-30,	Wellsboro,	Tioga.
Dec.	1,	Jobs Corner,	Tioga.
Dec.	2-3,	Mansfield,	Tioga.
Dec.	4,	Liberty,	Tioga.
Dec.	10-11,	Muncy Valley,	Sullivan.
Dec.	13-14,	Colley,	Sullivan.
Dec.	15-16,	Wilmont,	Bradford.
Dec.	17-18,	Stevensville,	Bradford.
Dec.	20-21,	Lime Hill,	Bradford.
Dec.	22-23,	Rome,	Bradford.
Feb.	21-22,	Balley,	Berks.
Feb.	23-24,	Mt. Aetna,	Berks.
Feb.	25-26,	Temple,	Berks.
Feb.	28,	Jacksonwald,	Berks.
Feb.	29,	Geigertown,	Berks.
March	1-2,	Cedarville,	Chester.
March	3-4,	Beyers,	Chester.
March	6-7,	Parkesburg,	Chester.
March	8-9,	Doe Run,	Chester.

DR. HANNAH McK. LYONS, Lincoln University, Chester County, Pa.

Jan.	6,	Jerseytown,	Columbia.
Jan.	7-8,	Numidia,	Columbia.
Jan.	10-11,	Mausdale,	Montour.
Jan.	12-13,	Salix,	Cambria.
Feb.	7-8,	Clarion,	Clarion.
Feb.	9,	Miola,	Clarion.
Feb.	10,	Frogtown,	Clarion.

Date.	Place.	County.
Feb. 11-12,	Sligo,	Clarion.
Feb. 16-17,	Zion Church,	Jefferson.
Feb. 18-19,	Beachwood,	Jefferson.
Feb. 21-22,	Emporium,	Cameron.
Feb. 23-24,	Woolrich,	Clinton.
Feb. 25-26,	Mackeyville,	Clinton.
Feb. 28,	Loganton,	Clinton.
Feb. 29,	Friedens Church,	Lycoming.
March 1-2,	Montgomery,	Lycoming.
March 3-4,	Hughesville,	Lycoming.

PROF. THOS. I. MAIRS, State College, Centre County, Pa.

Nov. 18-19,	Monroe Grange,	Monroe.
Nov. 20,	Tannersville,	Monroe.
Nov. 22-23,	Gilbert,	Monroe.

M. H. McCALLUM, Wernersville, Berks County, Pa.

Will attend all meetings in the SECOND SECTION from Dec. 13 to Feb. 19.

C. C. McCURDY, Hartstown, Crawford County, Pa.

Nov. 26,	Elders Ridge,	Indiana.
Nov. 27,	Shelocta,	Indiana.
Nov. 29-30,	Flora,	Indiana.
Dec. 1-2,	Pine Flats,	Indiana.
Dec. 3-4,	Wilgus,	Indiana.

PROF. FRANKLIN MENGES, York, York County, Pa.

Jan. 3-4,	Summit,	Schuylkill.
Jan. 5,	Klingerstown,	Schuylkill.
Jan. 6,	Pitman,	Schuylkill.
Jan. 7-8,	Andreas,	Schuylkill.
Jan. 10-11,	Nazareth,	Northampton.
Jan. 12-13,	Mount Bethel,	Northampton.
Jan. 14-15,	Cherryville,	Northampton.
Jan. 17-18,	Newburg,	Cumberland.
Jan. 19-20,	Centerville,	Cumberland.
Jan. 21-22,	Hogestown,	Cumberland.

C. E. MYERS, State College, Centre County, Pa.

Date.	Place.	County.
Nov. 29-30,	Mechanicsville,	Lancaster.
Dec. 1-2,	Lititz,	Lancaster.
Dec. 3-4,	Maytown,	Lancaster.

CHAS. F. NOLL, State College, Centre County, Pa.

Feb. 14-15,	Dover,	York.
Feb. 16-17,	Loganville,	York.
Feb. 18-19,	Red Lion,	York.

PROF. C. R. ORTON, State College, Centre County, Pa.

Nov. 19-20,	Ohiopyle,	Fayette.
Nov. 22-23,	Old Frame,	Fayette.
Nov. 24,	Tippecanoe,	Fayette.

WM. M. PATTON, Mosgrove, R. D. No. 2, Armstrong County, Pa.

Will attend all meetings in the FOURTH SECTION.

T. J. PHILIPS, Atglen, Chester County, Pa.

Dec. 20,	Irwin,	Westmoreland.
Dec. 21-22,	Greensburg,	Westmoreland.
Dec. 23,	Latrobe,	Westmoreland.

E. L. PHILLIPS, New Bethlehem, R. D. No. 2, Clarion County, Pa.

Will attend all meetings in the FIRST SECTION from Dec. 13 to Dec. 23 and Jan. 10 to March 9.

DR. W. T. PHILLIPY, Carlisle, Cumberland County, Pa.

Jan. 3,	Dimock,	Susquehanna.
Jan. 4-5,	Harford,	Susquehanna.
Jan. 6,	Clifford,	Susquehanna.
Jan. 7-8,	Thompson,	Susquehanna.

F. S. PUTNEY, State College, Centre County, Pa.

Nov. 19-20,	Blue Ball,	Lancaster.
Nov. 22-23,	Lampeter,	Lancaster.
Nov. 26-27,	Paradise,	Lancaster.

ROBT. S. SEEDS, Birmingham, Huntingdon County, Pa.

Date.	Place.	County.
Dec. 13-14,	Jefferson,	Greene.
Dec. 15-16,	Mt. Pleasant Church,	Greene.
Dec. 17-18,	Scottdale,	Westmoreland.
Dec. 20,	Irwin,	Westmoreland.
Dec. 21-22,	Greensburg,	Westmoreland.
Dec. 23,	Latrobe,	Westmoreland.
Jan. 3-4,	Moravia,	Lawrence.
Jan. 5-6,	Plaingrove,	Lawrence.
Jan. 7-8,	Pulaski,	Lawrence.

RAYMOND S. SMITH, State College, Centre County, Pa.

Jan. 3-4,	Schaefferstown,	Lebanon.
Jan. 5-6,	Annville,	Lebanon.
Jan. 7-8,	Jonestown,	Lebanon.

W. H. STOUT, Pinegrove, Schuylkill County, Pa.

Feb. 29,	Friedens Church,	Lycoming.
March 1-2,	Montgomery,	Lycoming.
March 3-4,	Hughesville,	Lycoming.

VERN T. STRUBLE, Athens, Bradford County, Pa.

Nov. 24-25,	Big Creek,	Carbon.
Nov. 26-27,	Mahoning,	Carbon.
Nov. 29-30,	Weatherly,	Carbon.
Dec. 1-2,	Daleville,	Lackawanna.
Dec. 3-4,	Tompkinsville,	Lackawanna.
Dec. 6-7,	Bald Mount,	Lackawanna.
Dec. 13-14,	Hobbie,	Luzerne.
Dec. 15-16,	Bloomingdale,	Luzerne.
Dec. 17-18,	Dallas,	Luzerne.
Dec. 20-21,	Tunkhannock,	Wyoming.
Dec. 22-23,	East Lemon,	Wyoming.
Feb. 28-29,	White Deer Church,	Northumberland.
March 1-2,	Rebuck,	Northumberland.
March 3-4,	McEwensville,	Northumberland.
March 6,	Elysburg,	Northumberland.

PROF. W. H. TOMHAVE, State College, Centre County, Pa.

Jan. 13,	Mercer,	Mercer.

R. O. UMHOLTZ, Sacramento, Schuylkill County, Pa.

Date.	Place.	County
Jan. 3-4,	Benshoff Church,	Cambria.
Jan. 5,	Boswell,	Somerset.
Jan. 6,	Stoyestown,	Somerset.
Jan. 7-8,	Somerset,	Somerset.
Jan. 10-11,	Berlin,	Somerset.
Jan. 12-13,	Cessna,	Bedford.

LEON OTICE VAN NOY, Troy, R. D. No. 66, Bradford County, Pa.

Jan. 10,	Orson,	Wayne.
Jan. 11-12,	Pleasant Mt.,	Wayne.
Jan. 13,	Aldenville,	Wayne.
Jan. 14-15,	Honesdale,	Wayne.
Jan. 17-18,	Greentown,	Pike
Jan. 19-20,	Paupack,	Pike
Jan. 21-22,	Egypt Mills,	Pike
Jan. 31-Feb. 1,	Springtown,	Bucks.
Feb. 2-3,	Sellersville,	Bucks.
Feb. 4,	Bristol,	Bucks.
Feb. 5,	New Hope,	Bucks.
Feb. 7-8,	Newtown,	Bucks.
Feb. 9,	Plymouth Meeting,	Montgomery.
Feb. 10-11,	Worcester,	Montgomery.
Feb. 12,	Harleysville,	Montgomery.
Feb. 14-15,	Trappe,	Montgomery.
Feb. 16-17,	East Greenville,	Montgomery.
Feb. 18-19,	Village Green,	Delaware.
Feb. 21 22,	Williamson School.	Delaware.
Feb. 23-24,	Philadelphia,	Philadelphia.

D. H. WATTS, Kerrmoor, Clearfield County, Pa.

Will attend all meetings in the SECOND SECTION.

JNO. W. WHITE, State College, Centre County, Pa.

Feb. 21-22,	Middleburg,	Snyder.
Feb. 23-24,	Mt. Pleasant Mills,	Snyder.
Feb. 25-26,	Hartleton,	Union.

W. R. WHITE, State College, Centre County, Pa.

Dec. 1-2,	Daleville,	Lackawanna.
Dec. 3-4,	Tompkinsville,	Lackawanna.
Dec. 6-7,	Bald Mount,	Lackawanna.

W. THEO. WITTMAN, Allentown, Lehigh County, Pa.

Will attend all meetings in the SECOND SECTION from Dec. 1 to 23; Jan. 14 to March 6, and Movable Institute Schools Jan. 4-5 Jerseytown, Jan. 6 Numidia, Jan. 7-8 Mausdale, Jan. 10-11 Salix.

E. L. WORTHEN, State College, Centre County, Pa.

	Date.	Place.	County.
Dec.	13-14,	Jefferson,	Greene.
Dec.	15-16,	Mt. Pleasant Church,	Greene.
Dec.	17-18,	Scottdale,	Westmoreland.

PAUL I. WRIGLEY, Eddington, Bucks County, Pa.

Dec.	13-14,	Arendtsville,	Adams.
Dec.	15-16,	Fairfield,	Adams.
Dec.	17 18,	New Oxford,	Adams.
Dec.	20-21,	Ickesburg,	Perry.
Dec.	22-23,	Greenpark,	Perry.

R. J. WELD, Sugargrove, Warren County, Pa.

Jan.	6,	Jerseytown,	Columbia.
Jan.	7-8,	Numidia,	Columbia.
Jan.	10-11,	Mausdale,	Montour.
Jan.	12-13,	Salix,	Cambria.
Jan.	17-18,	Pleasant Corner,	Lehigh.
Jan.	19-20,	Seipstown,	Lehigh.
Jan.	21-22,	Macungie,	Lehigh.
Feb.	7-8,	Cross Roads,	York.
Feb.	9-10,	Stewartstown,	York.
Feb.	11-12,	New Freedom,	York.

GENERAL LIST OF INSTITUTE LECTURERS WITH THEIR SUBJECTS.

Season 1915-1916.

ANDERSON, H. M., New Park, Pa.

1. Corn Culture.
2. Alfalfa and Other Legumes.
3. Control of Soil Moisture.
4. Home Mixing of Fertilizers.
5. Potato Culture.
6. Orchard Management.
7. Silage and the Soil. (30-40 minutes each).

BARNITZ, C. M., Riverside, Pa.

1. Mother Hen; Her Brood and Their Care. (Illustrated with slides).
2. Artificial Incubation and Brooding. (Illustrated with slides).
3. The Chick from Shell to Maturity. (Illustrated with slides).
4. Turkey Raising; How to Succeed. (Illustrated with slides).
5. The Evolution of the Rooster. (Illustrated with slides).
6. Feeding for Winter Eggs. (Illustrated with slides).
7. Poultry Diseases; Their Prevention and Cure. (Illustrated with slides).
8. Poultry Parasites; Their Description and Destruction. (Illustrated wih slides).
9. Best Farm Breeds and Their Needs.
10. The Modern Poultry House. (Illustrated with slides).
11. Finishing and Dressing Poultry.
12. The Farm Boy's Welfare. (Evening).

Note—Most of these topics are illustrated with slides and County Chairmen should notify when slides are desired.

BECHDEL, S. I., State College, Pa.

1. Silo and Silage. (Illustrated with slides). (40-50 minutes).
2. Feeding the Dairy Calf. (30-50 minutes).
3. Clean Milk Production.
4. Feeding the Dairy Cow.
5. Farm Butter Making. (30-50 minutes each).

BENNINGER, W. H., Benningers, Pa.

1. Specialties on the Farm.
2. Profit in Breeding Pure Bred Dairy Cattle.
3. Poultry Selection and Care of a Dairy Herd.
4. Poultry on the Farm.
5. Reasons of the High Cost of Living.
6. Butter Making on the Farm.
7. How to Make Good Roads in a Business Way.

BOND, M. S., Danville, Pa.

1. Some Things Wrong with the Institute.
2. Use and Results of Commercial Fertilizers.
3. Where and When I Use Lime.
4. What Farmers' Institutes were 30 Years Ago.
5. Points in Market Gardening.
6. Potato Culture. (20-30 minutes each).

BULKLEY, GEO. S., State College, Pa.

1. Feeding the Dairy Cow.
2. Selecting Grain Mixtures for Dairy Cows.
3. Raising the Dairy Calf.
4. The Dairy Heifer.
5. The Dairy Sire.
6. The Value of the Advanced Registry Test of Dairy Cows.

CAMPBELL, J. T., Hartstown, Pa.

1. Work of Farmers' Institutes. (Opening of Institute). (15 minutes).
2. Poultry, Feeding for Egg Production. (25 minutes).
3. Poultry, Parasites and Diseases. (25 minutes).
4. Poultry, Care and Feeding of Chicks. (25 minutes).
5. Problems of the Large Poultry Farm. (30 minutes).
6. Economic Maintenance of Productive Power of Soil. (45 minutes).

7. Tillage in Relation to Soil Fertility. (30 minutes).
8. The Practice of Tile Drainage. (30 minutes).
9. How Nature Makes Soil. (Illustrated with slides). (40 minutes).
10. The Story of Woodbine Farm. (Illustrated with slides). (40 minutes).
11. Home and Community Improvement. (40 minutes).
12. The Farm of Life. (Evening Lecture). (40 minutes).
13. The Summit Road. (Evening Lecture). (60 minutes).

CARD, FRED W., Sylvania, Pa.

1. Soil Management.
   (a) The Soil Laboratory.
   (b) A Farm Fertilizer Factory.
2. Farm Management.
   (a) Business Organization.
   (b) Records and Accounts.
3. Fruit Growing.
   (a) Producing the Tree and the Crop.
   (b) Business Problems Involved.
   (c) Bush-fruits and Strawberries.
4. Picture Planting on the Lawn. (Illustrated).
5. The Pig in the Poke, Pasture and Parlor.
6. Some Farm Mistakes we are Prone to Make.
7. The Dairy as a Foundation for the Farm Enterprise.
8. The Call of the Land.
9. Some Things Outside the Farmyard Gate.
10. Some Lessons at School. (30-45 minutes each).

CONARD, DR. M. E., Westgrove, Pa.

1. Selecting and Raising the Calf to Improve the Dairy Herd.
2. Cow Stable Construction; Sanitary and Comfortable.
3. Essential Points in the Production of Wholesome Milk.
4. Selecting and Breeding Horses for Farm and Market.
5. Comparative Types and Characteristics of the Dairy Breeds. (Illustrated with slides).
6. The Modern Dairy Equipment and Methods. (Illustrated with slides).
7. Concrete Construction for the Farm. (Illustrated with slides).
8. The Silo, Its Construction and Management.
9. The Babcock Milk Tester. (Demonstrated). (For Movable School only). (30-60 minutes each).

COOKE, PROF. WELLS W., U. S. Department of Agriculture, Washington, D. C.

1. Economical Feeding of Farm Stock.
2. The Restoration and Preservation of a Worn Out Soil.
3. Testing Milk and Its Products. (Illustrated with slides).
4. Alfalfa Growing in Pennsylvania.
5. The Most Profitable Use of the Silo.
6. The Effect of Feed on the Quantity or Quality of the Milk.
7. Commercial Fertilizers; Their Purchase and Use.
8. The Relation of Birds to Agriculture. (Illustrated with slides).
9. The Economical Feeding of the Farmers' Family. (40-50 minutes each).

DARST, W. H., State College, Pa.

1. Alfalfa.
2. Potatoes.
3. Soy Beans and Cowpeas.
4. Corn Improvement.
5. Soiling Crops.
6. Wheat Improvement.
7. Insects Injurious to Grain Crops.
8. Fungus Diseases of Farm Crops and How to Control Them.
9. Some Troublesome Weeds and Their Control.
10. The Corn Score Card and Methods of Judging. (30-40 minutes each).

DORSETT, E. B., Mansfield, Pa.

1. Building up the Dairy Herd.
2. The Feed and Care of the Dairy Cow.
3. The Silo as a Factor in Dairying.
4. Care and Use of Stable Manure.
5. Consolidation of Schools. (Illustrated with slides),.
6. Organization of Farmers.
7. Co-operation for Farmers.
8. Good Roads; How to Build and Maintain Them. (Illustrated with slides).
9. Commercial Fertilizer and How to Use It.
10. America's Uncrowned Queen. (Evening). (40-45 minutes each).

FASSETT, F. H., Meshoppen, Pa.

1. Care of the Orchard. (40 minutes).
2. Starting the Orchard. (40 minutes).
3. Pruning. (30 minutes).
4. Spraying; How and When.
5. Orchard Insects. (Illustrated with slides). (30 minutes).
6. Strawberries. (30 minutes).
7. Birds; Their Importance to the Farm. (Illustrated). (40 minutes).
8. Peaches; Planting and Care. (40 minutes).

FAUST, S. L., Hoboken, Pa.

1. Poultry on the General Farm. (30 minutes).
2. Potato Growing. (25 minutes).
3. Determining the Need of Fertilizers. (35 minutes).
4. Alfalfa for the General Farmer. (35 minutes).
5. Concrete on the Farm. (25 minutes).
6. A New Education for Our Boys and Girls. (Educational). (30 minutes).

FERGUSON, J. A., State College, Pa.

1. Woodlot Management.
2. How to Start a Woodlot.
3. How to Care for a Farm Woodlot.
4. How to Make Fewer Posts Durable.

FUNK, SHELDON W., State College, Pa.

1. Profitable Apple Culture.
2. The Peach; How to Raise It.
3. The Spraying of Fruit Trees.
4. The Growing of Small Fruits.
5. Potato Culture.
6. Home and Market Gardening.
7. Commercial Fertilizers and The Value of Home Mixing.
8. Flowers and Their Care for the Home Lawn. (Afternoon lecture).
9. General Orcharding in Pennsylvania. (Illustrated with slides).
10. An Appeal to our Farmer Boys. (Evening lecture). (36-60 minutes each).

GEORGE, S. C., West Lebanon, Pa.

1. Some Farm Problems; How to Solve Them. (30 minutes).
2. Care and Management of the Farm Team. (20-30 minutes).
3. Dairying in General Farm Work. (20-30 minutes).
4. Our Country Homes. (Evening lecture) (30 minutes).
5. Rural Schools; Some Comparisons. (Evening lecture). (30 minutes).

GERLAUGH, PAUL, State College, Pa.

1. Fattening Steers in Pennsylvania.
2. The Beef Breeding Herd.
3. Breeding and Feeding Horses.
4. The Farmer's Meat Supply.
5. Profitable Pork Production.
6. Silage as a Farm Feed.
7. Sheep Raising on the Pennsylvania Farm.

GILLINGHAM, GEO. L., Moorestown, N. J.

1. The Dairy Calf; Selection, Raising and Training for Life Work. (40 minutes).
2. Farm Poultry; Production of Winter Eggs. (50-60 minutes).
3. Pork Production or Breeding and Management of Swine. (40 minutes).
4. Economical Production of Hay. (30-40 minutes).

GIVEN, G. C., State College, Pa.

1. Lime.
2. Fertilizers; Home Mixture.
3. Bacteria in the Dairy.
4. Bacteria and Their Functions.
5. The Wonders of Modern Chemistry. (25-30 minutes each).

GOODERHAM, H. M., Patton, Pa.

1. Barn Manures; Their Waste and Treatment. (30-45 minutes).
2. Agriculture and our Rural Schools. (25-35 minutes).
3. Butter Making on the Farm. (35-45 minutes).
4. Growing Alfalfa. (35-40 minutes).
5. Marketing of Farm Products. (30-40 minutes).
6. The Boys and the Girls. (Evening lecture). (40-50 minutes).

GOODLING, C. L., State College, Pa.

1. Dairying for Profit. (35 minutes).
2. Growing Alfalfa. (25 minutes).
3. Growing Potatoes. (30 minutes).
4. Growing Corn. (25 minutes).
5. Fertilizing Farm Crops. (30 minutes).
6. The Use of Lime on Land. (30 minutes).

GROUPE, J. STUART, Jersey Shore, Pa., R. D. No. 4.

1. Handling Stable Manure for Best Returns.
2. Nineteen years Experience with Hogs.
3. Some Benefits received from Clover.
4. Humus the Foundation of Soil Fertility.
5. Corn Breeding and Culture.
6. Potatoes; How I grow Them at a Profit.
7. Some Advantages of the Farm over City Life. (Evening lecture). (30-40 minutes each).

GULDIN, PAUL R., Yellowhouse, Pa.

1. Hatching and Rearing Chicks. (30-40 minutes).
2. Winter Eggs; How to Get Them. (30-40 minutes).
3. Poultry for the General Farmer. (30 minutes).
4. The Business Side of Poultry Keeping. (30 minutes).
5. How to Feed the Laying Hen. (30-40 minutes).
6. The New Country Life. (30 minutes).
7. The Rural School: Its Problems and Its Future. (30 minutes).

HERMAN, J. A. Fombell, Pa.

1. Alfalfa is King.
2. Conservation of Moisture.
3. Soil Management.
4. The Proper Use of Fertilizer.
5. How to Keep the Boys and Girls on the Farm.
6. Organization and Co-operation.
7. How to Raise a Large Crop of Potatoes.
8. Fundamentals in Dairying.
9. The Imperative Need of Agriculture in the Public Schools. (30-40 minutes each).

HERR, JOHN D., Lancaster, Pa.

1. Commercial Apple Growing.
2. Commercial Peach Growing.
3. Injurious Insects and Diseases of the Orchard.

4. Injurious Insects and Diseases of Garden, Truck and Field Crops.
5. Soil Fertility.
6. Insecticides. Fungicides and Weed Killers.
7. Co-operative Buying and Selling.
8. Beautifying the Home Grounds.

HULSART, C. C., Matawan, N. J.

1. Asparagus Culture.
2. Early Tomato Culture.
3. Cantaloupe Culture.
4. Corn Culture.
5. Humus and Cover Crops.
6. Home Mixed vs. Commercial Fertilizers.
7. Insect Pests and Their Control.
8. Small Fruits, Strawberries and Raspberries.
9. Plant Breeding and Seed Saving by the Farmer.
10. Truck Farming; The Man, The Business and the Crop.
11. Our Education. (40-50 minutes each).

HULL, GEO. E., Sharpsville, Pa.

1. Making the Dairy Pay. (25 minutes).
2. Feeding Beef Cattle. (20 minutes).
3. Growing and Handling a Food Hay Crop. (20 minutes).
4. Getting Along on the Farm. (25 minutes).
5. Our Country Homes. (30 minutes).

LIGHTY, L. W., East Berlin, Pa., R. D.

1. The Business of Dairy Production. (30-60 minutes).
2. The Business of Marketing Dairy Products. (30-60 minutes).
3. Corn Growing. (30-45 minutes).
4. Silo, Soiling and Pasture. (30-60 minutes).
5. Maintaining and Improving Soil Fertility. (30-60 minutes).

LYONS, HANNAH McK., Lincoln University, Pa.

1. Science in Home Making.
2. Our Home.
3. Health in the Home.
4. Helpers We May Have.
5. What Shall We Eat.
6. Little Things.
7. Efficiency in Home Making. (30-40 minutes each).

MAIRS, PROF. THOS. I., State College, Pa.

1. Live Stock and Soil Fertility. (30 minutes).
2. What is a Balanced Ration? (30-40 minutes).
3. School Training for Farm Life. (30-40 minutes).
4. Consolidation of Country Schools. (20-30 minutes).
5. Rural Sanitation and Hygiene. (20-30 minutes).

McCALLUM, M. H., Wernersville, Pa.

1. Forms and Use of Lime.
2. Alfalfa.
3. Legumes; Their Relation to Crop Production.
4. Buying and Home Mixing Fertilizers.
6. Essentials of Success with Potatoes.
7. Farm Management.
8. Things Worth While on the Farm. (Evening). (25-35 minutes each).

McCURDY, C. C., Hartstown, Pa.

1. Profitable Poultry on the Farm. (40 minutes).
2. Hatching and Raising Little Chicks. (45 minutes).
3. Poultry Houses and Fixtures. (30 minutes).
4. Commercial Potato Growing. (30 minutes).
5. Bringing up the Soil. (40 minutes).

MENGES, PROF. FRANKLIN, York, Pa.

1. Natural Ways and Maintaining the Fertility of the Soil. (40 minutes).
2. Soil Moisture and Humus. (30 minutes).
3. Nitrogen Fixation. (30 minutes).
4. Ways of Introducing Clovers into Rotations. (30 minutes).
5. Corn Breeding.
6. Selection of Seed Wheat and Wheat Raising. (30 minutes).
7. Industrial Alcohol in Agriculture. (30 minutes).
8. Necessity of Education for the Farmer. (35 minutes).
9. Insect Life in Agriculture. (30 minutes).
10. Domestic Chemistry in the Country Schools. (30 minutes).
11. Community Interests. (30 minutes).

MITMAN, HOWARD, Hellertown, Pa.

1. Poultry Feeds and Feeding.
2. Keeping the Flock Well.
3. Hatching and Feeding Chicks.
4. Poultry Buildings and Grounds.

5. Handling and Selling Eggs and Poultry.
6. Raising Poultry Feed; How and What.
7. Incubators and Brooders.
8. Tillage; Preparation and Cultivation of the Soil.
9. Books and Periodicals; How to Choose Them; How to Use Them.
10. Essentials of a Country Home.
11. Keeping Farm Accounts.
12. Concrete on the Farm. (Illustrated with slides). (30 minutes each).

MYERS, C. E., State College, Pa.

1. Experiments with Vegetables. (Illustrated with slides).
2. Market Gardening.
3. Some Fundamental of Soil Management.
4. Potato Culture.
5. Principles and Practices of Plant Breeding. (Illustrated with slides). (35-45 minutes each).

NOLL, CHAS. F., State College, Pa.

1. Potatoes.
2. Alfalfa.
3. The Care of Pastures.
4. Principles and Methods in Plant Breeding. (Illustrated).
5. Conservation of Soil Moisture.
6. Care and Use of Farm Manures. (30-45 minutes each).

ORTON, C. R., State College, Pa.

1. Potato Diseases and Their Control.
2. Fire-blight of Fruit Trees.
3. Fruit Diseases.
4. Tree Diseases. (50-60 minutes each, illustrated with slides).

PATTON, WM. M., Mosgrove, Pa.

1. Planting and Care of Farm Orchard.
2. Lime; How, When and For What to Use It.
3. The Possibilities for Alfalfa and How to Grow It.
4. Potato Growing for Profit. (On small scale).
5. Clover Growing as a Soil Renovator.
6. Marketing the Products of the Farm.
7. Caring for the Soil.
8. The Little Red School-house as I Knew It. (30-40 minutes each).

PHILIPS, T. J., Atglen, Pa.

1. Poultry Houses.
2. My Hens are Worth $3.00 Each—Are Yours?
3. Commercial Fertilizer; What to Use.
4. Stable Manure; Its Best Use.
5. Economical Dairy Feeding.
6. Lime; How and When to Use It.

PHILLIPS, E. L., New Bethlehem, Pa., R. D. No. 2.

1. Poultry Farming.
   (a) Selection of Breeds.
   (b) Incubation and Brooding.
   (c) Feeding.
2. Poultry (Illustrated by slides). (50-60 minutes).
   (a) Growing the Fowls.
   (b) Houses.
   (c) Marketing.
3. Poultry Houses; Location, Construction and Care. (25 minutes).
4. The Need of Lime in the Soil. (30 minutes).
5. How to Buy Commercial Fertilizers and How to Use Them. (35 minutes).

PHILLIPY, W. T., Carlisle, Pa.

1. Soils and Their Management.
2. Increasing Soil Fertility.
3. Legumes and Their Importance.
4. Practical Dairying.
5. Alfalfa Growing.
6. Corn Selection and Culture.
7. Lime and Its Use.
8. Potato Growing.
9. The Old Farm. (Evening lecture).
10. The Most Important Duty of our People. (Evening lecture). (40 minutes each).

PUTNEY, F. S., State College, Pa.

1. Breeding Dairy Cattle.
2. Feeding Dairy Cattle.
3. Management of Dairy Herd.
4. Raising the Dairy Calf.
5. The Dairy Heifer.

ROW, CHAS. A. Yardley, Pa.

1. Growing and Selecting Corn. (30-40 minutes).
2. Building up the Dairy Herd. (30-40 minutes).
3. Feeding Dairy Cattle. (30-40 minutes).
4. Home Mixing Fertilizers. (30-40 minutes).
5. Increasing Soil Fertility. (30-40 minutes).
6. Agricultural Education. (30-40 minutes).
7. Agricultural Fairs. (20-25 minutes).
8. Eradication of Weeds. (20-25 minutes).

SEEDS, ROBT. S., Birmingham, Pa.

1. Value of Barnyard Manure. (30 minutes).
2. The Value of Fertility and the Cheapest Way to Get It.
4. Education and the Farmer. (20 minutes).
5. Benefits Derived from Farmers' Institutes. (20 minutes).
6. What Constitutes a Country Home. (45 minutes).
7. Mistakes of Life Exposed. (60 minutes).

SMITH, RAYMOND S., State College, Pa.

1. Crop Rotation. (30 minutes).
2. Farm Drainage. (30 minutes).
3. Functions and Control of Soil Moisture. (35 minutes).
4. The State Soil Survey and Its Value. (25 minutes).
5. Relation of the Farmer to his Soil. (Evening lecture). (45 minutes).
6. Rational Fertilizer Practice. (30 minutes).

STOUT, W. H., Pinegrove, Pa.

1. Manures and Fertilizers.
2. Tile Drainage.
3. Maintaining Fertility.
4. Fruit Growing.
5. Potato Culture.
6. Bee-Keeping.
7. Geological Observations.
8. The Origin of Soils. (30 minutes each).

STRUBLE, VERN T., Athens, Pa.

1. The Young Orchard.
2. Care and Profits of an Old Orchard.
3. Orchard Pests and Their Treatment.
4. Picking and Handling the Fruit Crop.

5. Making our Dairy Pay.
6. Dairy By-products and Their Use.
7. Farm Problems and Attractions. (Evening lecture). (35-40 minutes each).

TOMHAVE, PROF. W. H., State College, Pa.

1. Fattening Steers in Pennsylvania.
2. The Beef Breeding Herd.
3. Profitable Pork Production.
4. Breeding and Feeding Horses.
5. Sheep Raising on the Pennsylvania Farm.
6. The Farmer's Meat Supply.
7. Silage as a Farm Feed. (25-30 minutes each).

UMHOLTZ, R. O., Sacramento, Pa.

1. Progressive Poultry Farming of Commercial Poultry Farm.
2. The Farmer and the Farm Flock or Possibilities of Poultry on the Farm.
3. Some Reasons Why We Have Poultry Failures or Mistakes in Chicken Farming.
4. Getting the Egg or Caring for the Layers.
5. Getting the Chick or Hatching the Eggs.
6. Getting the Layer or Raising the Chick.
7. Echoes from the Show Room or Exhibiting and Judging Chickens.
8. The Scrub; The Utility-Bred and the Fancy Chickens.
9. Round Table Poultry Talks on Live Subjects. (40-50 minutes each).

VAN NOY, LEON OTICE, Troy, Pa.

1. How to Lay a Foundation for the Dairy Herd.
2. Feed and Care of the Dairy.
3. Making Butter on the Farm.
4. The Silo.
5. Swine as a Side-line with Dairying.
6. Soil Fertility.
7. Experience with Milking Machines.
8. Pertinent Points of Dairying. (Illustrated).
9. Farming vs. Other Occupations. (Evening lecture).
10. The Care of Milk.
11. Things Worth While. (Evening lecture).
12. Experience with Farm Tractors. (25-45 minutes each).

WATTS, D. H., Kerrmoor, Pa.

1. Apple and Peach Culture. (Illustrated with slides). (30-40 minutes).
   (a) Starting an Orchard. (30 minutes).
   (b) Orchard Tillage. (20 minutes).
   (c) Fertilizing the Orchard. (20 minutes).
   (d) Tree Diseases, Insects and Spraying. (20 minutes).
2. Building up the Dairy Herd for Profit. (30 minutes).
3. Economic Feeding of the Herd.
4. Alfalfa; Its Value and Culture. (30 minutes).
5. How to Make and Sell Gilt-Edge Butter. (30 minutes).
6. The Farmer and Good Roads. (30 minutes).
7. The Soil and Plant Growth. (30 minutes).
8. Farm Buildings and Blunders. (Evening lecture). (40 minutes).
9. Our Education. (Evening lecture). (40 minutes).

WELD, R. J., Sugargrove, Pa.

1. The Selection of Cows for the Dairy Herd.
2. The Breeding of the Dairy Herd.
3. The Feeding of the Dairy Herd.
4. Herd Records Necessary to Improving.
5. The Dairy Stocks.
6. The Babcock Test.
7. The Value of Membership in a Cow Testing Association.
8. The Organization of a Cow Testing Association. (40-50 minutes each).

WHITE, JOHN W., State College, Pa.

1. Phosphate Fertilizers.
2. Meaning of Soil Analysis.
3. Relative Value of Lime in Different Forms.
4. Soil Acidity.
5. Green Manures.
6. Functions of Lime and Magnesia. (30 minutes).

WHITE, W. R., State College, Pa.

1. Strawberries.
2. Fruit Growing.
3. Pruning.
4. The Use of Concrete on the Farm.
5. Farm Architecture. (Illustrated with slides).
6. The Central Township High-school. (30-40 minutes).

WILLIAMS, A. E., Cochranton, Pa.

1. General Physics of the Soil.
2. Chemistry of Lime and Its Effect on the Soil.
3. Commercial Fertilizers and Plant Growth.
4. Pure Bred Stock and Registration.
5. Pure Rural School made Efficient. (60 minutes each).

WITTMAN W. THEO., Allentown, Pa.

1. The Farm Poultry and How to Handle It.
2. Increasing the Winter Yield of Eggs.
3. Poultry Houses and Correct Principles of Construction.
4. Pennsylvania Poultry Houses; Good and Bad. (Illustrated with slides).
5. The Value and Possibilities of Breeding in Poultry.
6. Popular Varieties of Poultry, Fancy and Utility. (Illustrated with slides).
7. Specific Directions; How and What to Feed Poultry to get Results.
8. Correct Methods of Handling and Feeding Growing Chickens.

WORTHN, E. L., State College, Pa.

1. Profitable Fertilization of the Corn Crop. (40 minutes).
2. Crop Rotation for Pennsylvania. (30 minutes).
3. How to Secure the Greatest Profit from Manure. (30 minutes).
4. Fertilizing the Home Garden. (30 minutes).
5. The Essentials for Success with Alfalfa. (40 minutes).
6. Lime and Liming. (40 minutes).
7. Where and How to Purchase Fertilizers. (30 minutes).
8. The Farmers' Modern "Gold Bricks." (40 minutes).

WRIGLEY, PAUL I., Eddington, Pa.

1. Organic Matter and Soil Fertility.
2. Farm Management.
3. Hay, Growing and Harvesting.
4. Asparagus Culture.
5. The Use of Lime.
6. Commercial Fertilizers.
7. Feeding Farm Animals.
8. Human Foods; Their Uses.
9. The Care of Milk. (Illustrated). (25-40 minutes each).

LIST OF SPECIAL INSTITUTE INSTRUCTORS

W. H. Benninger, Benningers, Pa.
Prof. J. A. Ferguson, State College, Pa.
Paul Gerlaugh, State College, Pa.
G. C. Given, State College, Pa.
C. L. Goodling, State College, Pa.
Dr. H. H. Havner, State College, Pa.
Prof. M. G. Kains, State College, Pa.
Howard Mitman, Hellertown, Pa.
Chas. A. Row, Yardley, Pa.
Prof. B. O. Severson, State College, Pa.
Vern T. Struble, Athens, Pa.
Prof. W. H. Tombave, State College, Pa.
R. O. Umholtz, Sacramento, Pa.
Leon Otice Van Noy, Troy, Pa.
A. E. Williams, Cochranton, Pa.
Paul I. Wrigley, Eddington, Pa.
S. L. Faust, Hoboken, Pa.

DEPARTMENT LECTURERS

In so far as time and circumstances will permit, the officers of the Department of Agriculture are desirous of engaging in Institute work.

In order to prevent disappointment in the arrangement of programs, it is recommended that Institute Managers first consult the individual whose services they may wish to secure, before placing his name on the program.

Department lecturers come to these Institutes free of charge, except that they are to be taken from and to the railroad station at the expense of local managers. The topics which they will discuss can be procured by addressing the following officers of the Department of Agriculture:

HON. N. B. CRITCHFIELD, Secretary of Agriculture.
HON. A. L. MARTIN, Deputy Secretary and Director of Institutes
JAMES FOUST, Dairy and Food Commissioner.
PROF. H. A. SURFACE, Economic Zoologist.
DR. C. J. MARSHALL, State Veterinarian.

BIOGRAPHICAL SKETCHES OF THE INSTITUTE LECTURERS

H. M. ANDERSON was born August 26th, 1874, on the farm which he has recently purchased from his father. He graduated from the York Collegiate Institute in 1894, since which time he has devoted practically all his time to agriculture. Has been for quite a number of years growing very profitable farm crops in what has until very recent years been called the York County Barrens. He is particularly interested in growing alfalfa, potatoes and corn and is doing experimental work with these crops; has an apple orchard of which he is very proud and is a close student of modern methods of increasing soil fertility.

S. I. BECHDEL was born and raised on a general farm near Howard. Centre County, Pennsylvania. Taught in the public school of Blair and Centre Counties. Entered the School of Agriculture of the Pennsylvania State College in 1907, from which he was graduated in 1911. Served as Dairy Extension Agent for the U. S. Dairy Division from September, 1911, to May, 1913, in the State of Alabama. Was then transferred to the Office of Dairy Farming Investigations, Bureau of Animal Industry, Washington, D. C. He resigned from this position in December, 1913, to take up his present duties as Instructor in Dairy Husbandry in the Pennsylvania State College.

M. S. BOND was born on a farm in Montour county, Pa., February 26, 1834; lived and worked on a farm until eighteen years old, then taught school seven years, then was employed as a freight and passenger conductor for nine years and traveled as lost freight and car tracer and purchasing agent for the Delaware, Lackawanna and Western Railroad Company for five years. Has been for over twenty-five years engaged in farming and market gardening; during a part of this time, engaged in breeding and raising blooded Jersey cattle and still keeps some of the best in the State; has made the raising of potatoes by the thousands of bushels a specialty for twenty-five years; has been and is now using more fertilizer to the acre than any man in his county, and is now making gardening a specialty.

CHARLES M. BARNITZ began the study of poultry culture twenty-five years ago and now conducts a model up to-date poultry plant at Riverside, Pa., and is a recognized authority on poultry. His success and expert articles in the poultry press of the United States and Europe attracted the American Press Association, the greatest newspaper syndicate in the world. He accepted a place on their staff as editor and artist of their poultry feature, and his poultry writings are now read by millions of people throughout the United States. His modern and extensive plant at Riverside is a practical and profitable one and interesting experiments with land and water fowl afford much valuable data for platform and press.

GEORGE S. BULKLEY was born and raised on a dairy farm in Lake County, Illinois; attended public school and High School at Libertyville, Illinois. He next attended Northwestern University at Evanston, a year. Was clerk in office of Sheldon School, Chicago, Illinois. Worked on dairy farm. Attended the University of Wisconsin, graduating from the College of Agriculture. After graduation he came to The Pennsylvania State College to take his present position as Instructor in Dairy Husbandry, assisting in experimental work in milk production and having charge of the official testing of dairy cows for Advanced Registry.

FRED W. CARD was born at Sylvania, Pa., in 1863. Attended the common schools and the Mansfield State Normal, from which he graduated in 1880. He taught three years in the public schools and took a business college course, after which he spent five years in gardening and small-fruit growing. In the fall of 1889 he entered Cornell University and completed the regular course in agricultural in 1892. He was then granted a fellowship and remained for graduate work the following year, receiving his master's degree in 1893. He was appointed assistant in horticulture at the Cornell University experiment station, but resigned in a short time to become associate professor of horticulture at the University of Nebraska, remaining in this position for five years. In 1898 he became professor

of horticulture at the Rhode Island College of Agriculture and Mechanic Arts, and in 1901 professor of agriculture as well. This position he resigned in 1897 to engage in actual farming on the farm where he was born, which he had purchased while in Nebraska.

J. T. CAMPBELL was born in Springfield township, Fayette county, Pa., December 18, 1872; is the son of a prominent farmer; received his early education in the public schools of his native district; left the public schools with a more than average education and at once took up the study of agriculture at home, while working ou his father's farm; he studied carefully all leading books and journals of his day. Married in 1894, and took up gardening and poultry culture, and was successful from the start. When the Pennsylvania State College started its correspondence courses in agriculture he took up the work and has since pursued same with diligence. Owns a large farm in Crawford county, upon which he has worked out many important agricultural problems. In poultry culture he has been exceptionally successful, having made it a subject of special study, together with soil physics. Keeps in close touch with the State Experiment Station and the Natioual Department of Agriculture; has written some for various agricultural and poultry journals.

DR. MILTON E. CONARD was born in southern Chester county, of an ancestry of successful agriculturists. He obtaiued his education in the public and high schools and Millerville State Normal School. He was for some years eugaged in farmiug in his home locality; later taking the course in veterinary medicine at the University of Peunsylvauia, in which institution he was for 16 years lecturer of Dairy and Milk Inspection and Veterinary Obstetrics. Throughout his veterinary career he has been closely identified with dairy interests, practicing for some years in a dairy locality, aud having for over ten years given his entire time as Inspector and Consulting Expert for a large number of the dairies furnishing milk to the City of Philadelphia, from Pennsylvania, New Jersey, Maryland and Delaware.

W. H. DARST was born on a farm in Miami county, Ohio, in the year 1884. After completing a high school education he rented a farm and farmed for two and one-half years. He then entered the Agricultural College of the Ohio State University taking the bachelors degrec in the year 1910. During the year 1910, and until the fall of 1912 he was employed in the Agricultural Extension Department of the Ohio Agricultural College, as lecturer and demonstrator of Agronomy, more particularly of farm crops. Since September 1912, he has been employed by the School of Agriculture of the Pennsylvania State College as Assistant Professor of Agronomy, farm crops division.

E. B. DORSETT was born on a farm in Richmond township, Tioga county, Pa., February 17, 1868. He received a common school education in the district where he lived, then attended the Mansfield State Normal School, from which he was graduated in 1896. Ten years were spent teaching during the winter months and farming during the summer. With the exception of six years spent in the Sheriff's Office at Wellsboro, he has always lived and worked on the farm. At present, he and his brother, S. C. Dorsett, own aud operate a large farm in Mansfield township, making dairying a specialty. His work in the Grange as State Lecturer, has brought him in close touch with the farmers and farm operations throughout the State, and has given him a fund of knowledge that will be useful to him in his work as an institute worker.

F. H. FASSET, Meshoppen, Pa., was born June 3, 1855, in Windham township, Wyoming county, Pa., moved to Meshoppen township iu 1869, to the farm where he now resides; was educated in the common schools and took a course in select schools in Meshoppen borough; has been actively engaged in the growing of tree fruits with marked success for the last twenty-five years; all up-to-date methods of orchard treatment, spraying and pruning have been in use; took up the business of growing small fruits for the market some 12 years ago and has met with fair success. Is President of Wyoming County Horticultural Society and in close touch with the fruit interests in this section.

SHELDON W. FUNK was born in Boyertown, Berks County, Pa., and comes from a long line of fruit growers and gardeners. He has a good High School education and also attended Perkiomeu Seminary. From childhood he has been brought up among fruit aud vegetables, five years haviug been spent in Florida in the same work.

He is now engaged iu greenhouse, fruit and truck business with his father in Boyertown where they are specializing in the growing of fancy fruits and vegetables for a retail and wholesale market.

He is also in the employ of the Pennsylvauia Department of Agriculture in the capacity of Farm Advisor on Fruit and Market Gardening, and his services are free to all persons in the State desiring informatiou or help along this line.

J. A. FERGUSON is a native of New York State, from the Lake Region, graduated from Hamilton College, Clinton, N. Y., 1896, engaged in teaching for ten years, graduated in Forestry from Yale University, served in the U. S. Forest Service in Idaho, has been at State College since 1908, except for one and one-half years at the University of Missouri, Columbia, Mo., where he established the Forestry Department and the Forest School, is at present in charge of the work in Forestry at Pennsylvania State College.

G. C. GIVEN was born in Auburn, Maine. Degree of Bachelor of Science in 1906 from the New Mexico State College; Master of Science in 1910 from the Pennsylvania State College; Doctor of Philosophy in 1914 from the University of Goettingen, Germany; 1907-1910, Assistant Chemist at the Pennsylvania State College Agricultural Experiment Station; 1910-1915, Assistant Professor of Experimental Agricultural Chemistry at the Pennsylvania State College; 1915, Associate Professor of Experimental Agricultural Chemistry, Pennsylvania State College.

H. M. GOODERHAM was born and reared on the farm where he now resides and cultivates in Cambria county. He was educated in common schools academy at Carrolltown, Pa., and Ohio Normal University, Ada, Ohio. After teaching in common schools for several terms, he took up farming and experimental work, which he has followed successfully ever since. He has throughout his life been very much interested in education and uplifting of his brother farmer and his family. He has held several public offices of trust and at one time was a member of the State Board of Agriculture and at that time holding the distinction of being the youngest member on the Board in the State. He is at present treasurer of the Cambria County Horticultural Society.

L. W. LIGHTY was born in York county, Pa., 1857; attended the public schools of his neighborhood; afterwards attended a select school in Adams county and then taught school for seven winters. During this time he attended the York County Academy one term and also attended the State Normal School at Millersville. He then kept store, but not liking the business he got out of it and started in the poultry business, keeping both market and fancy poultry, and engaged in bee keeping and the culture of small fruits. In 1893 he purchased the farm upon which he now lives. The land was worn out and the buildings quite dilapidated. He has improved this until it is now one of the best farms in his county. He has a large library of standard books, keeps a selected dairy of cows, and has all the modern improvements needed to equip a first-class farm.

CHAS. F. NOLL was born and raised on a farm at Green Park, Perry county, Pennsylvania. His early education was secured in the public schools, the New Bloomfield Academy and the Cumberland Valley State Normal School and from the last he was graduated in 1900. Five years he spent as teacher in the public schools after which he took the Agricultural course in the Pennsylvania State College from which he was graduated in 1906. Then he was field assistant in the Department of Agriculture at Harrisburg for one year, and manager of the Nostrand Fruit Farm on Shelter Island, New York, for one year. In 1908 he went to the Pennsylvania State College to engage in the investigational work which he has followed since then except for one year (1910-11) spent in graduate work at Cornell University. At the Pennsylvania Experiment Station he has charge of the field experiments along agronomic lines, which include investigations with cereals, forage crops, potatoes, plant breeding and liming and fertilizer treatments.

MALCOM H. McCALLUM is a Berks countian by birth, born, however, of Scotch parentage, and "dyed deep in the wool" in truck and fruit raising, his father, James McCallum, being the pioneer celery and fruit grower for the Reading markets. He is in the prime of life. He was educated in the common schools of Berks county, Pa., Butler University, Indianapolis, Indiana, and the University of Pennsylvania, Philadelphia, Pa. In 1904 he was chosen farm and garden superintendent of State Asylum, Wernersville, Pa., which position he now holds.

THOMAS I. MAIRS spent his early life upon a stock farm and graduated from the College of Agriculture of the University of Missouri in 1896. He took graduate work at the Michigan Agricultural College, the University of Illinois, and the University of Missouri. He was superintendent of field experiments at the Universiy of Illinois in 1896-7, and Assistant in Agriculture at the University of Misouri from 1897 to 1901. Since he has been connected with the Pennsylvania State College. He is now Superintendent of Correspondence Courses and Professor of Agricultural Education. He has taught dairy and animal husbandry and has had charge of the experiment work along these lines.

PROF. FRANKLIN MENGES, Ph. D., was born forty-six years ago at Menges Mill, York county, Pa.; the first nineteen years of his life were spent on his father's farm with all the ardour that farming meant in those days; he then began a course of preparation for college at the Baugher Academy, Hanover, Pa., and entered and graduated from Pennsylvania College, Gettysbnrg, with the class of 1886; was immediately tendered and accepted the position of assistant professor of chemistry in his Alma Mater, which position he held until 1896, when he came to York and took the professorship of the sciences in the York High School, which position he now holds; received the degree of Ph. D. from his Alma Mater for special work in chemistry, mineralogy and physics. He has for years been a student of the "Experiment Station Record," and has continued an interest in practical agriculture and has lectured before Farmers' Institutes.

C. R. ORTON was born April 1, 1885, at East Hardwick Vermont. Lived on a farm until twenty years old when he entered the University of Vermont from which he was graduated in the Agricnltural Department, June, 1909. Was Assistant in Plant Pathology at the Vermont Experiment Station nntil Febrnary 1, 1910, when he removed to the University of Wisconsin. Held the position of Assistant Plant Pathologist in the Wisconsin Agricultnral Experiment Station until 1911, when he transferred to Pnrdue University as Assistant Botanist and remained there until January 1, 1913. Came immediately to the Pennsylvania State College where he holds the position of Associate Professor of Botany, and Plant Pathologist in the Experiment Station.

F. S. PUTNEY was born on a dairy farm in New Hampshire. In 1901 he was gradnated from the Concord High School and the following year entered the New Hampshire State College from which he gradnated in 1905 after which he secured a position on a pure bred Jersey farm and a few months later was appointed Assistant in Animal Husbandry and Agronomy at the Pennsylvania State College from which institution he received his Master's degree in 1908. The following year he received a fellowship at the University of Missouri where he made a special study of breeding as well as dairy cattle judging and stock management. In 1909 he was appointed Assistant to Dean and Director Mumford. After a year he was appointed Professor of Animal Hnsbandry at the Rhode Island State College which position he held until July 1, 1913, when he returned to the Pennsylvania State College as Assistant Professor of Dairy Husbandry.

E. L. PHILLIPS was born on his father's farm in Clarion connty, Pa. Was educated in the common schools and a conrse in the High School at Reid Institnte, Pa. Since then he has studied extensively in agriculture. Was married in 1885, after which he devoted his time to agriculture, owning and operating his 200 acre farm with profit to himself. Said farm is in Clarion county, Pa. He has devoted his farm chiefly to the production of fruits, live stock and grain suitable to that location and market. He has been an experimenter with various plant foods. His real estate holdings and commercial standing are a strong recommendation to himself and to the farm. On his farms known as Valley Hamus, there are from 5,000 to 6,000 fowls kept during each year.

CHARLES A. ROW has lived on a farm all his life and done experimental work along various agricultural lines for the last six years. The two years previons to these were spent in the Ontario Agricultural College at Guelph, Canada, from which institution he received a diploma. He is now in business with his father on a large farm near Yardley. They are making a specialty of raising pure bred cattle and improving corn and wheat by plant selection.

R. S. SEEDS was born in Huntingdon county, Pa., 1852; was educated in the pnblic schools and at the Shade Gap Academy. He was raised npon a farm and traveled for eighteen years among the farmers selling agricultural implements. In 1892 he bought a farm that had been rnn down, which he has greatly improved.

W. H. STOUT was born October 18, 1840, in Lower Nazareth township, Northampton connty, Pa., was educated in the common schools and engaged in varions occupations, serving an apprenticeship at coopering and milling, at clerkship and traveling salesman; has lived on his present farm for the past twenty-eight years, and is engaged in general farming, trucking, frnit growing and bee-keeping; has acquired practical and scientific information by observation and study; speaks English and German.

LEON OTICE VAN NOY was born in Troy, Pa., 1876, on a dairy farm. At the age of six years his father started in the pure blood cattle. Was educated in the public school, Troy High School and took special work in general agriculture and dairy farming for three years at the Pennsylvania State College. He returned and went into partnership with his father in the dairy business and made a number of experiments in feeding for profit. In the fall of 1900, he was forced to quit his father's farm on account of ill health and traveled for a few years. Was in and through 34 states. During this time he worked at a number of occupations besides farming. Had a great opportunity to compare city life with country life. In 1906 he returned to his father's farm and took the management of it. Has a private creamery and at the present time is trying to solve the problem of the direct route from the producer to consumer.

WILLIAM HENRY TOMHAVE was born at Fergus Falls, Minnesota, December 19, 1881. He attended the common schools until fifteen years of age. At the age of eighteen he entered the Minnesota Agricultural High School at St. Anthony Park, from which he graduated in 1902. In the fall of 1903 he entered the College of Agriculture at the University of Minnesota, graduating in 1907. In the fall of 1907 he came to Pennsylvania State College as Assistant in Animal Husbandry. He resigned his position in the spring of 1908 to go to Manchuria, China, as Livestock Expert for the Manchuria Government. In 1910 he returned to the United States to take charge of the Livestock Extension work at the University of Minnesota. In the summer of 1912 he was appointed Professor of Animal Husbandry at the Pennsylvania State College which position he now holds.

RAYMOND S. SMITH, was born in Ohio and soon after moved to southern California where he was reared on a large fruit and general farm. He was graduated from Pomona College in 1907, spent one year teaching, two years farming, and then entered the College of Agriculture of the University of Illinois. He was there with the State Soil Survey for two seasons and was graduated in Agriculture in 1913. His present work is teaching Soils at the Pennsylvania State College.

W. THEO. WITTMAN was born and raised on a farm in Lehigh county. As a small boy he was particularly interested in poultry and fruit growing and has always since retained a strong interest in both these branches of agriculture, constantly studying and working with both. He is now Poultry Judge with a National reputation, and his name is constantly appearing in the better class of poultry journals as a contributor to the poultry knowledge of the day. He has written several books on poultry keeping that are largely advertised and have commanded a big sale. As Superintendent of the Poultry Department of the Great Allentown Fair he has built up there one of the very finest and best displays of pure breed poultry to be seen anywhere in this country, greatly stimulating the interest in better poultry among farmers and others throughout eastern Pennsylvania and thereby enhancing the market value of their poultry and poultry products enormously.

D. H. WATTS was born near Kerrmoor, Pa., May 25, 1861; was raised on the farm of his father, Martin Watts, and educated in the public schools, which schooling was supplemented by a few months attendance at the Indiana State Normal School. He always has been interested in farmer's organizations and served two years as President of the Clearfield County Agricultural Society. He located upon his farm in 1866 and erected thereon modern buildings and established a dairy plant, where fine butter for a special trade is produced. The growing of fruits is also a specialty. On his farm known as "Orchard View Farm," there are 3,000 apple, peach, pear and plum trees, all his own selection and planting.

JOHN W. WHITE was born in Greenville, North Carolina, 1883. He received his elementary training in the public schools of that city and graduated from Bethel High School in 1899. Entered North Carolina Agricultural and Mechanical College and graduated in 1903. He spent the first three years after graduation in Chemical research and was appointed Assistant Chemist, Pennsylvania Experiment in 1906. In 1911 he obtained leave of absence and entered University of Illinois graduate school obtaining the degree of Master of Science in Agriculture in 1912. He was appointed Soils Research Chemist and Associate in Agronomy at the Pennsylvania State College in July, 1912, in which capacity he is still serving.

E. L. WORTHEN was born and reared on a farm in Illinois. He graduated at the University of Illinois in 1904. He was connected with the Illinois College and Station until 1906. From 1906 to 1909 he was Scientific Assistant in the National Bureau of Soils then in charge of "Soil Investigations," North Carolina Department of Agriculture until January, 1913, when he came to the Pennsylvania State College and Station as Assistant Professor of Agronomy. He has spent one year in gradnate study at the Cornell University and received the degree of Master of Science in Agriculture in 1908. His present work consists of the teaching and investigation in Soils and Fertilizers.

W. R. WHITE was born on a farm near Grove City, Mercer county, Pennsylvania. He graduated from the Classical Course in Geneva College, in 1901. He taught school one year, was in the Civil Engineering Department of the Pittsburg and Lake Erie Railroad three years, and graduated from the Agricultural Course in Pennsylvania State College in 1907. He was Assistant in Correspondence Courses, Pennsylvania State College from 1907 to 1908 and was Farm Superintendent near Pittsburgh from 1908 to 1911. In 1911 he returned to Pennsylvania State College and at present is Assistant Professor of Agricultural Education in the Pennsylvania State College, State College, Pennsylvania.

Directions: County Chairmen and Local Institute Committees will please use the following outline for heading of program and follow as far as practicable the classification of subjects, embracing no more than two distinct topics for one session. The address of Welcome and Response can be omitted and a brief introductory by the County Chairman substituted when Local Committee deem advisable.

SAMPLE PROGRAM This Sample is Designed as an Aid to Institute Managers in Making up Their Programs.

PROGRAM

OF THE

.....COUNTY.

FARMERS' INSTITUTES

TO BE HELD UNDER THE AUSPICES OF

DEPARTMENT OF AGRICULTURE OF PENNSYLVANIA

DIVISION OF FARMERS' INSTITUTES.

IN ..... HALL

..... PA.

FRIDAY AND SATURDAY, DEC. 5 AND 6, 1912

EXERCISES PUBLIC AND FREE—EVERYBODY IS INVITED.

ORDER OF BUSINESS

OPENING SESSION

Devoted to Soil Conditions

Wednesday Afternoon, December 3, 1:30.

Presiding Officer, ...

Opening Exercises.

Soil Fertility.

Soil Cultivation.

How to Converse Soil Moisture.

(Question Box.)

Adjournment.

EDUCATIONAL SESSION.

Wednesday Evening, December 3, 7:00.

Nature Study for County Schools.

Essential Qualifications to Successful Teaching.

Attractive Country School Grounds.

The Central Township School.

Adjournment.

DAIRY, STOCK AND POULTRY SESSION

Thursday Morning, December 4, 9:00.

(Question Box.)

Feed for the Dairy Cow.

The Silo As An Economic Investment in the Dairy.

Poultry Breeding and Feeding for Profit.

Adjournment.

Thursday Afternoon, December 4, 1:30.

(Question Box.)

Good Country Roads; How Obtained.

Sheep Husbandry.

Legumes for Feed and Fertility.

Adjournment.

LADIES' SESSION

In the Interest of Country Homes.

Thursday Evening, December 4, 7:00.

Music.

A Model Home.

What Books and Magazines Shall We Read; The Quality and Preparation of Food.

Heating, Lighting, Ventilating and Sanitary Arrangement of Country Homes.

Lawn and Garden.

Social Life in Rural Districts.

Adjournment.

SPECIAL NOTICE

The foregoing order will be followed as closely as possible, but other exercises will be introduced, if found desirable.

Although these institutes are designed and conducted for the education and advantage of farmers, yet all who are interested are invited to attend, and it is hoped that they will show their appreciation, not only by being present at the meetings, but also by taking part in the discussions.

ASK QUESTIONS

A question box will be kept upon the secretary's desk, and all are invited to place therein such questions as they may wish to have discussed during the session. At the proper time, designated by the meeting, these questions will be referred to some one for answer, or brought up for general discussion.

All granges, alliances, agricultural societies and kindred agricultural organizations are specially invited to attend.

For further information, and for programs, address,

Name, ...

Address, ...

Chairman of the Board of Institute Managers for ————County.

Local Committee.	Committee on Question.	County Board of Managers.
Wm. Stevens Address	William Stover, Address, ...	J. A. Walker, Address, ...
Mrs. Jane Weily, Address	Miss Jane Miller, Address, ...	Wm. Cedars, Address, ...
Miss Emma Stone, Address		John Williams, Address, ...

MEANS OF ACCESS

Trains on the B. C. R. R. arrive from the East at 8:30 A. M. and 5:19 P. M.; from the West at 9:40 A. M. and 9:38 P. M.

On the P. R. R. trains from the East arrive at 4:52 and 9:54 A. M. and 4:32 P. M.; from the West at 10:18 A. M. and 5:08 and 9:23 P. M.